

635.05  
GAR  
V. 89















# THE GARDEN.

**WATERER'S GOLD MEDAL RHODODENDRONS,** Azaleas and Roses, rare Hardy Shrubs, Fruit Trees, Berries, etc., Alpine and Perennial Plants, Vegetable and Flower Seeds, Scotch-grown Seed Potatoes. Catalogue free.—**JOHN WATERER, SONS & CRISP, LIMITED,** Twyford, Berks; Bagshot, Surrey; and London.

**JAMES GRAY, LTD.,** Builders of Conservatories, Greenhouses, etc., and Heating Engineers, Danvers Street, Chelsea, London, S.W.3. Wire: Gray, Kensington 90. Telephone: Kensington 90 and 91.

**WAKELEY'S PATENTED HOP MANURE.** The original and only substitute for Stable Manure. See advert. on back cover.

**WM. DUNCAN TUCKER & SONS, LTD.,** Lawrence Road, South Tottenham, N.15.—Conservatories, Winter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**BIRDS' BATHS, GARDEN VASES, SUN-ALS, NESTING BOXES.** Catalogue (No. 4) free.—**MOORTON,** 60, Buckingham Palace Road, S.W.

**RIVERS' FRUIT TREES, ROSES, VINES,** Apples, Oranges and Orchard House Trees are of first-class quality and a large and select stock is always on view. Inspection invited. Catalogue post free on application.—**THOS. RIVERS AND SON, LIMITED,** The Nurseries, Sawbridgeworth, Herts.

**EVERY HORTICULTURIST SHOULD READ "THE HORTICULTURAL EXHIBITOR."** A. J. Macself's best book. It teems with valuable information and sound advice for all who grow for show. 3/6 net of all Booksellers. Send for prospectus "G" of the "HOME GARDEN BOOKS" to the Publishers: **THORNTON BUTTERWORTH, LTD.,** 1, Bedford Street, London, W.C.2.

**HYDRANGEA MAD!** A delightful sensation caused by growing the lovely new varieties; send for H. J. JONES' Catalogue of Gold Medal Hydrangeas, Chrysanthemums, Monticlias, Michaelmas Daisies, Hardy Phlox, etc., free on application. Also H. J. JONES' Chrysanthemum Guide, 17th edition, post free, 1/3.—**Ryecroft Nurseries, Lewisham.**

**SHRUBS** are becoming more and more the fashion in gardening. "Shrubs for Amateurs," Mr. W. J. Bean's new book, is the best on the subject at a reasonable price. 5/- net. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**CATALOGUE** of gardening books will be sent free on application to "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**WELLS' CATALOGUE OF CHRYSANTHEMUMS** now ready, and will be sent post free on application.—**WELLS & Co., Merstham, Surrey.**

**PLANT PESTS AND PARASITES.**—A useful booklet on garden troubles by **HORACE J. WRIGHT** is to be obtained from the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, W.C.2; 11d. post free.

**IMPROVE YOUR GARDEN** by the use of Oak Trellis Screens; they are ideal for growing creepers of all kinds and for securing privacy, at the same time adding an artistic feature that will last a lifetime (being pickled in preservative). No trouble to erect (being made in sections). Send for lists and get an estimate from **W. T. REVITT,** Railway Works, Olney.

**BARR'S SURPLUS Spring-Flowering Bulbs.**—Daffodils, Tulips, Hyacinths, Muscari Heavenly Blue, Chionodoxas, Scillas, etc. Bulbs in splendid condition at *greatly reduced prices.* List on application.—**BARR & SONS,** King Street, Covent Garden, W.C.2.

**IRON AND WIRE FENCING** for Gardens, Tree Guards, Gates, Arches, Espaliers, Rose Stakes and Ornamental Garden Iron and Wirework of every description. Send for Illustrated Catalogue. Also Kennel Railing and Poultry Fencing. Ask for separate lists.—**BOULTON & PAUL, LIMITED,** Norwich.

**TOMATO CULTIVATION: UNDER GLASS AND OUTDOORS.** By R. V. GIFFARD WOOLLEY. A practical booklet, 9d. net, by post 11d. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**ALL PROFESSIONAL GARDENERS** should become Members of the British Gardeners' Association. Full particulars (stamp).—**JOHN WEATHERS,** 1, Park View, Isleworth.

**SEWAGE DISPOSAL FOR COUNTRY HOUSES.**—No emptying of cesspools; a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—**WILLIAM BEATTIE,** 8, Lower Grosvenor Place, Westminster.

**HOME-BREWED WINES AND UNFERMENTED BEVERAGES** for all seasons of the year. By **ANNE AMATEUR.** A helpful booklet containing also recipes for invalid drinks, and published at 9d., post free 11d., at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, W.C.2.

**YORK STONE PAVINGS,** crazy or rectangular, rustic copings, steps, roughly squared or random shaped, flat bedded wallstones, garden edging, rockery, etc.—**SAMUEL JOHNSON AND SON,** Quarry Owners, Mirfield, Yorkshire.

**CHOICE NEW CHRYSANTHEMUMS.**—Our Catalogue of nearly 900 varieties, including Grand Novelties for 1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready. Post free on application.—**J. W. COLE AND SON,** Chrysanthemum Specialists, Peterborough.

**POTATOES: HOW TO GET THE BEST CROPS.** A booklet that is full of useful information. By **EDWIN BECKETT, V.M.H.,** 9d. net, by post 11d. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**WALL AND WATER GARDENS.** With chapters on rock gardens, heath gardens, and paved water gardens. By **GERTRUDE JEKYLL,** 7th edition, revised. 17s. 6d. net; by post, 18s. 4d.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**MANURES.**—The most complete little book on the subject is "The Manual of Manures," by **H. VENDELMANS,** 4/5; by post, 4/9. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**THE CULTURE OF CHRYSANTHEMUMS.** By **W. WELLS,** 2/6 net; cloth, 3/6 net; by post 6d. extra.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**ANTIRRHINUMS AND PENTSTEMONS,** by **A. J. MACSELF.** A practical booklet on the best methods of cultivating these popular flowers. 9d. net; by post, 11d. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**CANADIAN AND AMERICAN GLADIOLI.**—The best of the standard varieties and novelties.—**J. W. CROW,** Simcoe, Ontario, Canada.

**SUTTON'S GUIDE AND CATALOGUE** of Vegetable and Flower Seeds, etc. for 1925, is now published. All lovers of the garden should secure a copy. Profusely illustrated in colour and black and white, and contains a complete list of the best varieties of Flowers and Vegetables, etc.  
**SUTTON AND SONS, THE KING'S SEEDSMEN, READING**

**DOBBIE'S 1925 CATALOGUE AND GUIDE,** 136 pages, 194 illustrations. Free to all readers. Please mention **THE GARDEN** when writing.—**DOBBIE & Co., LTD.,** Edinburgh.

**BATH'S CARNATIONS, ROSES AND PEONIES.**—New Illustrated Catalogue containing full cultural notes of the best new and standard varieties, is now ready, and will be sent post free on application.—**DEPT. (E), R. H. BATH, LIMITED,** The Floral Farms, Wisbech.

**CHEAP GOVERNMENT WIRE !!!** Great for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760 yards). Postcard to-day for free samples and list of 300 bargains.—**GREEN'S GOVERNMENT STORES,** 69, Albert Street, Lytham.

**ALPINES AND DWARF CONIFERS** for Rock Gardens. 50,000 pot-grown Alpines in stock; over 300 varieties. 2 dozen collection, 8 kinds, 15/- carriage paid. Lists free.—**HODSONS,** Castlegate, Nottingham.

**BARNARDS, LTD., NORWICH,** for Garden Requisites of all kinds.

**FIDLER'S NEW ILLUSTRATED GARDEN SEED GUIDE AND CATALOGUE FOR 1925 IS NOW READY,** and a copy will be sent post free to any address on receipt of a post card.—Write at once to **FIDLER & SONS,** Royal Berkshire Seed Stores, Reading.

**GARDEN DESIGN** is best dealt with in "Planning and Planting of Little Gardens," by **G. DILLISTONE,** 6/-; by post, 6/6. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**THE GARDEN DOCTOR: Plants in Health and Disease,** by **F. J. CHITTENDEN, V.M.H.,** freely illustrated, 7/6 net, by post 8/-. A prospectus of this practical book will be sent post free on application to The Manager, "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**SWEET PEAS AND HOW TO EXCEL WITH THEM.** By **HORACE WRIGHT,** 9d. net, by post 11d. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**STORING VEGETABLES AND FRUITS,** with chapters on "Drying in the Oven and by the Kitchen Fire." By **HERBERT COWLEY,** 9d. net, by post 11d.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**LABELS TO LAST—AT LAST!**—You write by any nail point, on prepared (Patented) Metal, yet it cannot fade. Severely tested for years on inventor's Nurseries. The R.H.S., after long trial, award H.C. List of shapes free. Samples 2d.—**WEBSTERS PATENTS Co.,** Witheridge, Devon.

**GREENHOUSE PAINTING AND GLAZING.**—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt, kegs extra; 7lb. tins, 4/- post free; 14lb. tins, 5/6 each, carriage extra, tins free.—Full particulars from **W. CARSON & SONS,** Grove Works, Battersea, S.W.11.



# CARTERS TESTED SEEDS

*BREAK all RECORDS with*

## GIANT STRIDE

### PEA

ORDER

NOW

**The Largest**

**PODDED**

**DWARF PEA** IN THE WORLD.

HEIGHT 2 FEET.

**ILLUSTRATED CATALOGUE**

POST FREE ON APPLICATION.

**James Carter & Co.** SEEDSMEN TO  
H.M. THE KING.  
**RAYNES PARK, LONDON, S.W., 20.**

Please mention THE GARDEN when writing.

*Notes from Maidstone.*

#### A RARE CHERRY.

We can now offer a few plants of the rare *Prunus pseudo-cerasus* (Lindley) at 21/- each, two years old, or one year at 15/-. This fruits very early in a cold house and is quite hardy outdoors, but flowers too early to produce fruit. The leaves are very handsome and most uncherrylike. We believe this is the first time this has been offered for sale in England.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Maidstone.

Established 1796.

Please mention THE GARDEN when writing.

**Webb's**  
Beautifully  
Illustrated

**GARDEN  
CATALOGUE  
for 1925**

is  
**Now Ready.**



Contains particulars of the . . .  
**"Best of Everything that Money  
Can Buy  
for the Garden and Lawn."**

If you are interested, and would like a copy,  
post your name and full address to:—

**WEBB & SONS, LTD.,**  
The King's Seedsmen, STOURBRIDGE.

Please mention THE GARDEN when writing.

## ARTINDALE'S PLANTS ALWAYS PLEASE

### BEAUTIFUL FLOWER GARDENS

**S**HOULD you contemplate making a new Flower Border or adding to your collection, write for our new Catalogue of Hardy Plants. We can supply your requirements and give satisfaction. We guarantee to supply strong healthy clumps (not miserable offsets as are so often supplied).

In Open Competition this year we have gained the following awards:

1st Prize. Royal Agricultural Show, Leicester, for Group of Hardy Flower roots. 1st Prize. Royal Agricultural Show, Leicester, for Herbaceous Border. 1st Prize. Yorkshire Show, for Herbaceous Group. 1st Prize. Saltaire Rose Show, for Herbaceous Group. Gold Medal. North of England Horticultural Society, for Herbaceous Flower Border. 1st Prize. Leeds, for Herbaceous Flowers. 1st Prize. Southport, for Collection of Gladioli. 1st Prize and Gold Medal. Huddersfield, for Hardy Flowers.

**Wm. ARTINDALE & SON,**  
NETHER GREEN, SHEFFIELD

Please mention THE GARDEN when writing.

**Toogood's  
Seeds**



The same labour, the same tools, the same manures—  
**WITH OUR GUARANTEED GARDEN SEEDS  
ADDED**—will yield for you an infinitely better Garden than ever before. Send a postcard to-day for our 160-page, beautifully illustrated

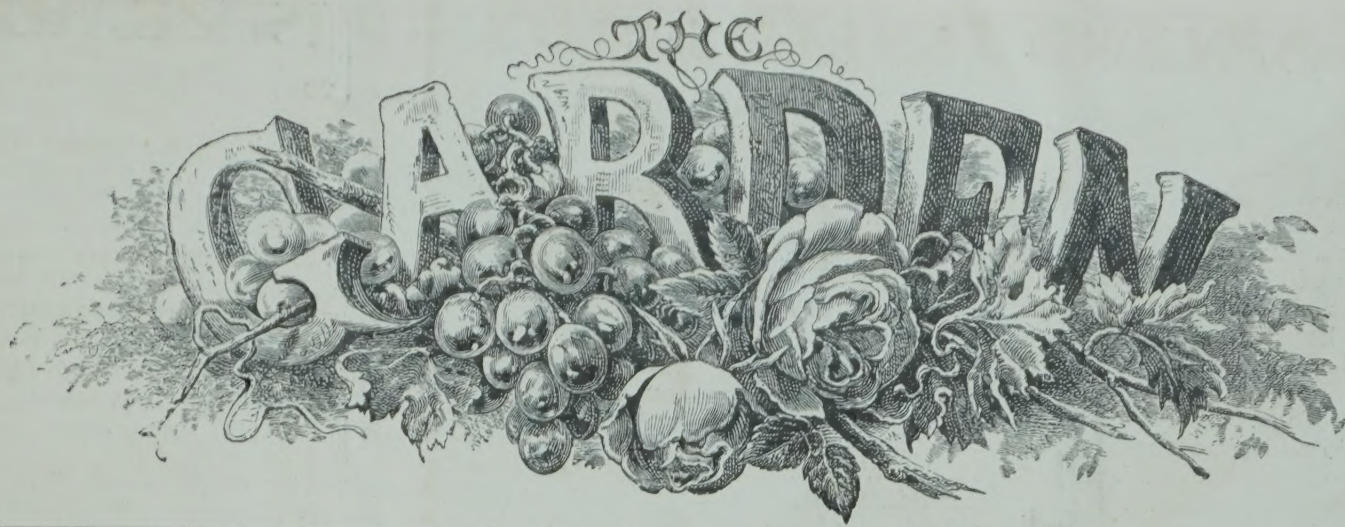
#### FREE GUIDE TO GUARANTEED GARDEN SEEDS.

Every packet ordered thence must grow for you and please you or you will get it replaced freely: and the seeds cost less to buy. Address us personally:

**TOOGOOD & SONS, Ltd.,**  
Seedsmen to H.M. the King, SOUTHAMPTON.

Please mention THE GARDEN when writing.





VOL. LXXXIX.—No. 2772.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. Offices for Advertisements: 6—11, SOUTHAMPTON STREET, STRAND, W.C.2.  
Entered as Second-class Matter at the New York, N.Y., Post Office.

JANUARY 3, 1925

## A CHRISTMAS PRESENT

THE other week I wrote a note on plants as presents. Now some unknown reader has taken me at my word and has sent me a Christmas present. It is a packet of seeds, and I found it in my stocking. They are wrapped in curious soft paper with hieroglyphics written thereon in some unknown foreign tongue. Perhaps the sender is a Russian, for as far as I can make out the writing reads 429I SAMX SDNOMLA. I thought I knew all the shorthand as used by collectors, but this puzzled me. On the other hand, I am accustomed to slight difficulties in my research among the botanical treasures of the world. As this is a typical case, perhaps some of my readers might be interested in following with me to the conclusion I have arrived at.

First of all, I write down a short non-technical description of the seed. This is it:

"Semis embryo maturissima ovoido ellipticale baso blunto apice acuto, in longitudine 2.563183 cm. in latitudine 1.000003 cm. Necessarius est crachulare cum ferocissimis dentibus; integumente tenuiore, rubro-nigra in colore, findetus cum passis rugis. Semis edulis est cum raro vetissimo porto vino."

This simplifies matters considerably if you know Latin; I know what it is not. There is no achenodium, a double achene, as the cremocarp of the umbelliferæ, therefore it is not an umbellifer. There was a short stalk attached to one of the seeds, therefore the plant might have been addicted to geoplaiotropism, which presupposes the fact that it was not a biennial. Under a microscope a section showed there were distinct signs of girder schlerenchyma, which does away with any hope that it might belong to the interesting family of scrophulareaceæ. In case these slight technicalities should bore some of my readers, I shall pass over numerous other interesting experiments as to what it was not and give a hint from which even a novice could name the family. I found that one of the seeds had a slight attack of protocollenchyma. After that it was easy; one after another experiments followed each other in rapid succession in my laboratory. I found that the tissue was kyanophilous, that the quaternary glands were quaquaversal, that zygoxis was complete. If any reader has not guessed the family from my clear deductions, I will tell them. It was Rosaceæ.

But here I am stuck; until I have seen the heterocotylous growth I can get no farther. From my examination of the seeds under a microscope I have a very fair idea of the interior economy of the plant. It is only natural that I should, because I have dissected 80 per cent. of the seeds. The other two seeds I have sown in a pot, and here is where the microscopic

examination helps: I know exactly the mixture in which to sow them. Two portions of dehydrated fluor spar, a dash of tar and two dashes of hydroxyethyltrimethylamonium hydroxide, and a little dynamite to give it a flavour. The seeds were dusted with arnica before sowing and well watered with weed killer. Now I am sitting back hopefully to wait for results. Meanwhile I have tentatively named the plant Sdnomla Hæmoglobini.

Thus was the first part of my task accomplished. The collector was the next conundrum. 429I is obviously a collector's number: that is simple, but who was Samx. I cabled to my botanical friends throughout the world. In three days a reply came back from Professor Poppittinovitch of the University of Ekaterinberg: "Know him well, Samx is Samxzcitscz," and then it stopped. There may have been more, but no doubt the cable became overloaded and broke down. The rest was easy. I looked him up in "Who's Who in Botany" and found the following entry:

"Samxzcit, etc. Parentage and breeding doubtful, has followed the pursuit of botany since birth, experimented at an early age in the qualities of granular oats, quickly followed by marvellous perception in judging the nutritious value of wheat, flour, potatoes, etc. At the age of 18 tried the effects of datura, aconite and stramonium on his grandmother. Left suddenly on a botanical expedition to Mongolia where he has been ever since. Works: Poison and its Potentialities, Vegetable Alkaloids and their Lethal Doses. Hobbies: Surf-riding. Address: The Red House, Koko Nor. Clubs: The Koko-nor Athletic."

He must be a most talented man, but why should he send me seeds. Some ass at my elbow has just made the suggestion that if read backwards the inscription reads Almonds Xmas 1924. What a coincidence! E. H. M. C.

[The editorial part of the writer should have risen in wrath against this outburst on the too prodigal use of Latin names in matters horticultural!]

### AMONG OTHER ARTICLES IN OUR NEXT ISSUE WILL BE:

THE CULT OF THE POLYANTHUS, by H. W. Canning-Wright.  
TREES AND SHRUBS FOR AUTUMN FOLIAGE.  
DOUBTS AND DISCOVERIES, by H. A. Greatorex.  
WINTER SPRAYING, by A. J. Macself.  
FORCING POTATOES, by William S. Rowles.



# NEW ZEALAND SHRUBS IN ENGLISH GARDENS

TELLS WHICH OF THESE VARIETIES FROM THE SOUTH ARE MOST SATISFACTORY IN OUR GARDENS.

SO much interest has been shown in New Zealand plants by present-day gardeners that Dr. Cockayne's valuable articles in recent numbers of *THE GARDEN* will surely add a further stimulus to their cultivation. Unfortunately, a great many of the plants mentioned by Dr. Cockayne are not at present obtainable in this country, but we must look forward with keen interest to their successful introduction.

The dominant feature of the New Zealand flora is the wealth of evergreen shrubs and trees, many of them beautiful in flower as well as in foliage. Many species and varieties of veronica, olearia, senecio and pittosporum are popular plants in British gardens, not only in Devon and Cornwall but all along our southern and western seaboard and in sheltered inland districts.

The following notes on various New Zealand plants (all of which may be obtained from English nurserymen) may prove of some interest to those who appreciate choice plants:

**CORDYLINE AUSTRALIS.**—The cabbage tree is one of the most distinctive shrubs in cultivation, but unfortunately it

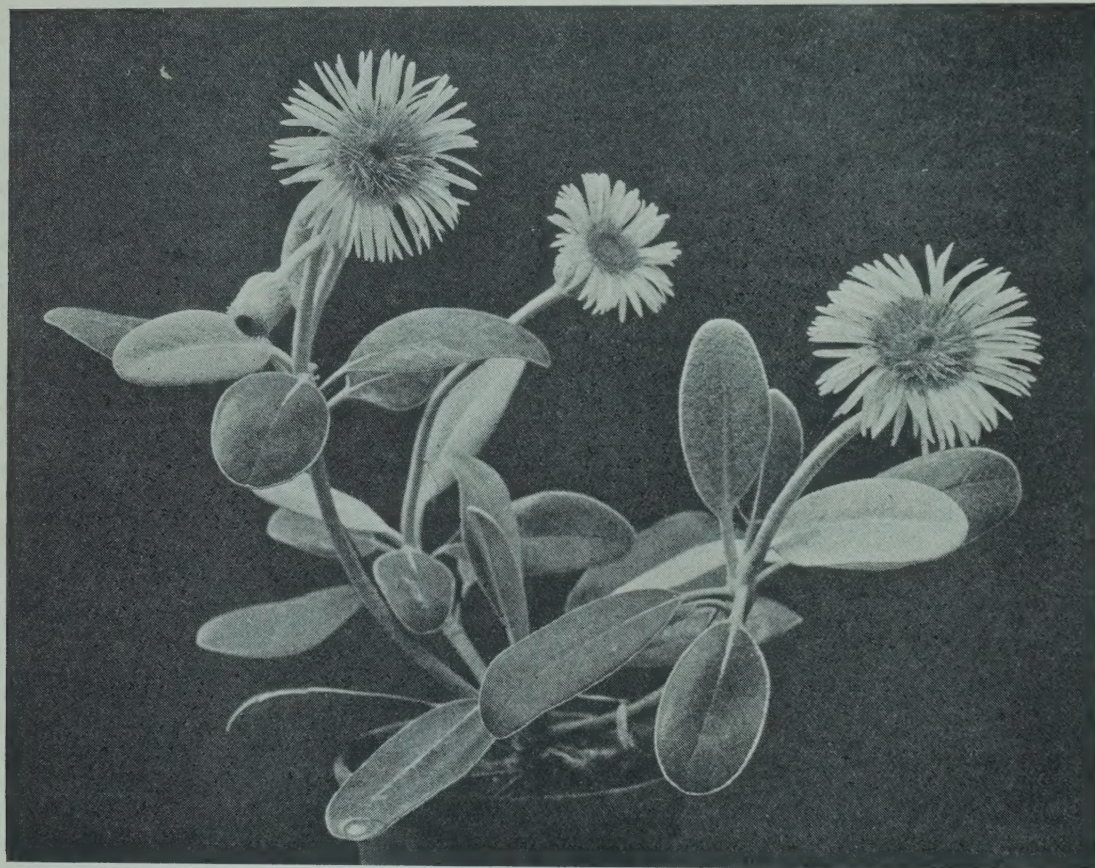
**PITTOSPORUM TENUIFOLIUM.**—A magnificent hedge plant for mild maritime districts. The rich green undulate leaves and black branches are very striking, and it bears clipping well. It soon forms a beautiful pyramidal specimen if allowed to grow naturally. There is a handsome silver-variegated form and several closely allied species. The flowers of most New Zealand pittosporums are small and purplish black; they would easily escape notice were it not for their strong honey scent, which is exhaled only at dusk to attract night-flying insects. Pittosporums come readily from seed and should be planted in their permanent position when still small.

**RUBUS AUSTRALIS.**—The "Bush Lawyer" is more strange than beautiful, but worth a place in the gardens of "the curious." In the leafless form the stems are armed with innumerable sharp prickles like tiny sharks' teeth. One can readily understand that it is easier to fall into its clutches than to get out of them—hence its popular name, bestowed on it by the colonists.

**CARMICHAELIA** and **NOTOSPARTIUM** are closely allied genera, usually known in this country as "pink brooms." Both are interesting but not showy small shrubs, though the individual flowers are very pretty when closely examined. *Notospartium Carmichaeliae* is the better of the two, but *Carmichaelia australis* is rather more hardy. There is a rare dwarf species of *Carmichaelia* (*C. Enysii*) which is well suited to a nook in the rock garden.

**CLIANTHUS PUNICEUS**, "lobster-claw" or "red Kowhai," is one of the most gorgeous flowering shrubs in cultivation. It is said to be extremely rare in the wild state now, but luckily is very popular in gardens in New Zealand as well as in this country. The large pendent clusters of bright scarlet flowers nestling among the pinnate shining green foliage attract the attention of the least observant passer-by. A high south wall is the ideal position for a *clianthus*, but where this is not available it will succeed on an east or west wall. It is evidently a short-lived plant, and is liable to collapse suddenly without any obvious cause: luckily it grows very rapidly, and a healthy young plant will soon fill up the space left vacant. Seeds germinate easily but must be protected from slugs and mice, both pests being

much addicted to the tender young shoots. Seedlings should be pot-grown until put in their permanent position, as they transplant badly. The white variety of the lobster claw is less striking than the scarlet type, but is none the less a lovely flower and well worth a choice position. During hard frost a light protection may save the *clianthus* from severe injury, but it must not remain covered up for long. Nearly allied to *clianthus* are the equally interesting yellow-flowered forms of *Sophora tetraptera* (often listed in catalogues as *Edwardsia*). This is the true "Kowhai" of the Maoris and has been chosen as the national flower of New Zealand. *Sophora* is somewhat hardier than *clianthus* and may be grown in the open in sheltered spots. The small leaflets vary greatly in number according to the age of the plant; in a young plant a leaf will be composed of about six pairs of leaflets, but the leaves of an old tree will consist of any number of leaflets up to forty pairs. *S. microphylla* is more frequently grown than *S. grandiflora*, but they are both splendid flowering shrubs for mild districts. Although almost evergreen, they frequently shed their foliage in early spring just before the flower-buds open. Kowhai timber is highly esteemed in New Zealand on account of its great durability.



**OLEARIA INSIGNIS**, NOTABLE FOR ITS LARGE THICK LEAVES.

is only hardy near the coast. A strikingly sub-tropical effect is easily produced by grouping several cabbage trees with New Zealand flax (*Phormium tenax*), *beschornerias*, *yuccas* and similar plants with noble foliage. The *cordyline* resists gales wonderfully well and is seldom damaged by snow; when a leaf becomes laden with snow it gently bends down and shoots the snow off. They grow very rapidly in good soil and begin to flower when six or seven years old. The small white flowers are borne on a very large branching inflorescence and are deliciously fragrant. *Cordylines* flower freely in a spring succeeding a hot summer; after a dull, cold season there will be few flowers. *Cordyline indivisa* is a dwarfer species with much wider foliage of great beauty, but comparatively rarely seen in our gardens. *C. Banksii* is a smaller species, with long narrow leaves and quite as hardy as *C. australis*.

**CLEMATIS INDIVISA.**—This well known favourite of cool greenhouses is a truly glorious climber in districts where little frost is experienced and where it can be allowed to ramble through a large tree. Its great clusters of starry white flowers are borne in March and April and show up well against the thick evergreen foliage. It is easily propagated by cuttings inserted in a sand frame in June or July, or layers may be taken in pots.



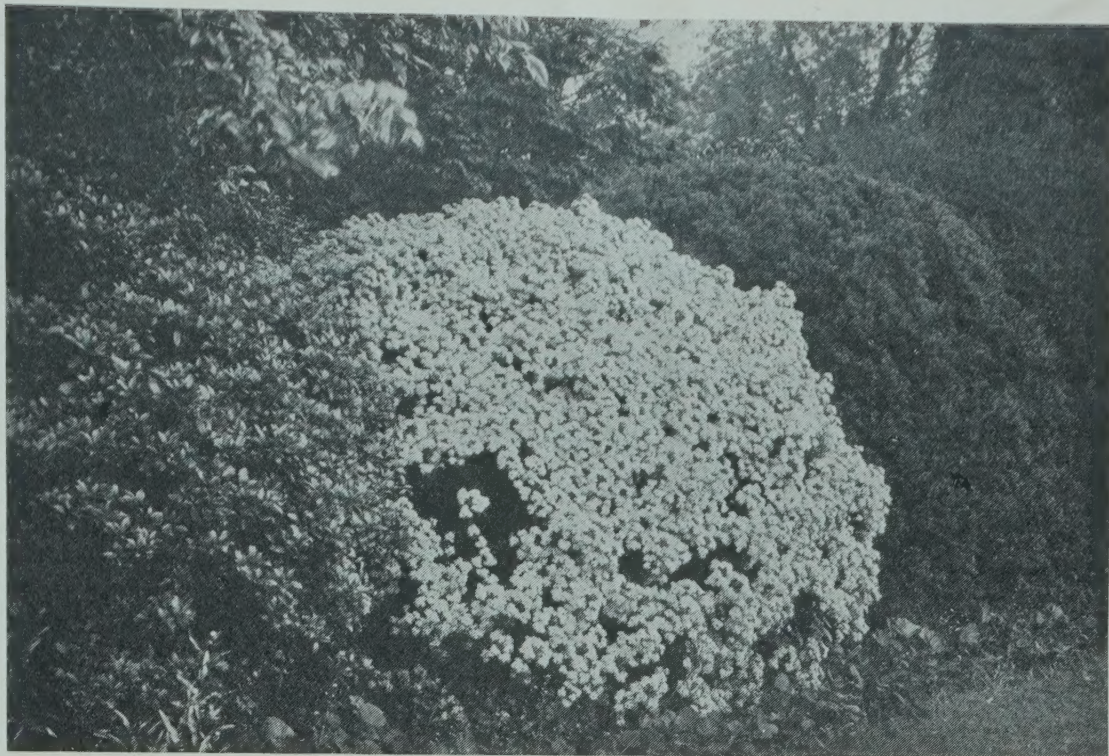
The handsome white-flowered *LINUM MONOGYNUM* is well known in English gardens and is often seen flourishing in sunny corners of the rock garden. It is a true flax and must, of course, not be confused with the totally different New Zealand flax (*Phormium tenax*), which belongs to the lily family.

*POMADERRIS ELLIPTICA* is a little known but charming small shrub for mild districts. A correspondent to THE GARDEN kindly sent me seeds from New Zealand a few years ago, from which I raised plants now about 5ft. high, which flowered freely last spring and are again well laden with buds. It is a curious habit of pomaderris to carry its flower buds all through the winter looking as though they would open any day. The flowers are yellow, individually small, but borne in such profusion that the plant appears smothered with blossom. There is another larger species sometimes met with, called *P. apetala*, but it has little beauty of flower and seems to me very inferior to *P. elliptica*.

*ELÆOCARPUS*.—The two species of this shrub found in New Zealand, can only be grown in the most favoured British gardens, but are well worth a place in a cold house elsewhere for the beauty of their sprays of lily of the valley-like flowers and exquisite blue berries. I have tried seeds sent from New Zealand several times without success, but I believe cuttings can be struck in gentle heat.

*HOHERIA POPULNEA* (the lace-bark) is much hardier, and as it flowers in the open from August up to November its beautiful snow white flowers are particularly valuable. *H. p. lanceolata* is a variety (or perhaps a distinct species) with narrower leaves and flowering earlier in the season. It is equally beautiful.

*PLAGIANTHUS BETULINUS* is seldom grown, although it quickly develops into a very graceful and handsome tree, especially when covered with its small greenish blossoms in



THE MOST POPULAR AND BEST OF THE DAISY BUSHES, *OLEARIA HAASTII*.

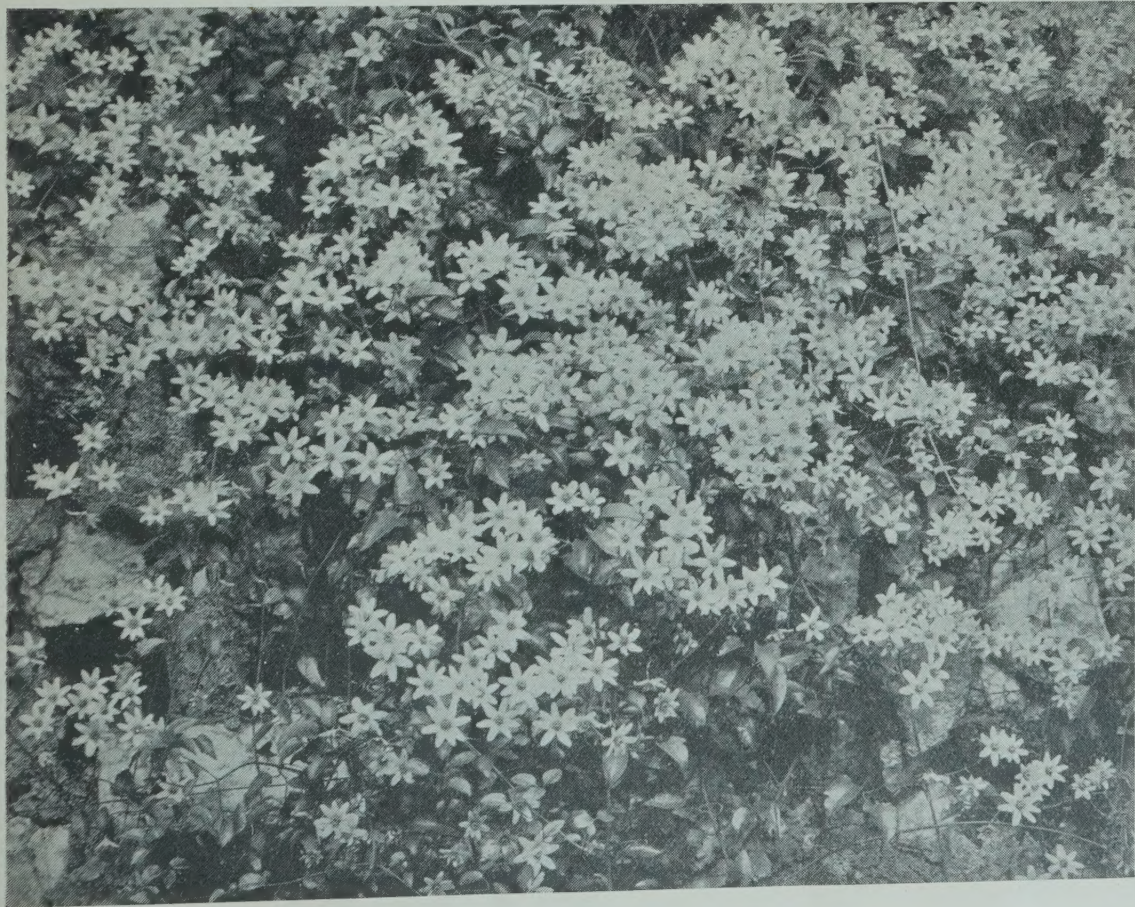
spring. Unless plants of both sexes are grown no seed will be produced, but if a male and female tree are near one another a crop of seedlings will probably appear beneath the female tree. Like most New Zealand shrubs, they should be finally transplanted when small. *P. betulinus* must not be confused with the Australian *P. pulchellus*, which is a very inferior species.

*GAYA LYALLII* is a well known and deservedly popular shrub; there are several distinct forms in cultivation and seedlings vary to a considerable extent. It is frequently grown against a wall, but in southern England, at any rate, it is quite hardy enough to be grown in the open.

*HYMENANTHERA CRASSIFOLIA* is another fairly familiar shrub which is occasionally grown as a low hedge. Its attraction, however, lies in the curious piebald berries which it carries in such profusion every autumn on the lower side of its branches. One wonders what object the plant has in view for concealing its berries so completely from the sight of passing birds.

**MYRTLES.**—Some of the most beautiful of all New Zealand flowering shrubs belong to the family Myrtaceæ. The myrtles themselves are represented only by three or four species, of which *Myrtus bullata* is the most striking. The leaves are large (1in. or 2ins. long), reddish brown and curiously swollen between the veins. The flowers are much like the common myrtle, but the berries are red instead of black. It is not a very easy plant to establish and is certainly more tender than the much smaller *Myrtus obcordata*, which seems quite easy in a sheltered border.

**LEPTOSPERMUMS** (manukas or tea-trees of the colonist) take the place of the British gorse and broom on poor sandy soils. *L. scoparium* is now largely grown in this country, but does not seem to succeed far inland. In gardens where it thrives it makes rapid growth and is smothered with lovely white blossoms every spring. Hundreds of seedlings appear near the old plants and have to be weeded out ruthlessly or they would monopolise the whole garden. Very beautiful varieties of *L. scoparium* have been introduced of recent years, notably *L. s. Nichollii* with crimson flowers and *Boscawenii*



ONE OF THE MOST BEAUTIFUL CLEMATISES, *C. INDIVISA*.



and *Chapmannii* with large pink flowers, but these last seem more tender than the type.

*METROSIDEROS* (bottle-brush plants) are among the very choicest of all New Zealand trees, but alas! they can only be attempted outdoors in the Scilly Islands or the warmest Cornish gardens. Great trees of *M. robusta* and *M. tomentosa* ablaze with scarlet blossoms must be a marvellous sight, but *M. lucida* is the only species likely to succeed at all in most gardens. Although it is said to attain a height of 60ft. in its native haunts it does not get much opportunity here to show what it can do as a hard frost cuts back the young shoots severely.

**FUCHSIAS.**—None of the three fuchsias peculiar to New Zealand compares in beauty of flower with the South American species, but the little *F. procumbens* has long been a favourite for rock gardens and greenhouses, owing to its neat trailing habit and large purplish-red fruits. The flowers are not showy, but carry most beautiful blue pollen, a feature shared by its compatriot, the big *Fuchsia excorticata*. This attains the dimensions of a tree and is one of the few deciduous New Zealand trees. It seems fairly hardy in this country, but does not flower freely until it attains some size.

**COROKIA COTONEASTER** is an attractive small shrub with interlacing black branches, starred with small yellow flowers in early summer, followed by small red fruits. *C. buddleoides* is a larger shrub, less hardy and consequently seldom grown except in very mild districts. *Griselinia* is fairly often met with in seaside gardens where it stands wind and salt-laden spray well, but it cannot be called very handsome or distinct-looking as usually seen. In New Zealand the *griselinias* are valuable timber trees and are doubtless imposing subjects.

The **HEATH** family (*ericaceæ*) are not strongly represented in the Dominion, nor are those which do occur particularly noteworthy. Several species of *gaultheria* are found in both islands and are now becoming established in British gardens. A very handsome evergreen shrub which is sometimes grown here is *Myoporum laetum*, whose bright green shining leaves are full of translucent oil glands which give them a very striking

appearance. The flowers are white with a lilac tinge, borne in clusters of from three to six. *Solanum aviculare* is a very quick-growing shrub which attains the height of 8ft. in a single season, but as it cannot resist more than a few degrees of frost it generally gets severely cut (if not actually killed) in winter. The violet flowers are very large for a *solanum*, and are followed by oval fruits the size of a pigeon's egg, which are said to be edible. Self-sown seedlings appear all over the garden where a plant has fruited, so that it is easy to replace when the old ones have perished.

The New Zealand **VERONICAS** are so numerous and variable a genus that it requires a specialist to determine them correctly. Many fine hybrids have been raised between various large-flowered species in beautiful shades of blue, purple and crimson.

The **COPROSMAS** are well represented in the New Zealand flora, but are seldom seen in this country. Some of them bear beautiful blue berries and appear to be quite hardy so that they would be desirable additions to our gardens.

Most of the **OLEARIAS** in cultivation in Britain are natives of New Zealand (*O. Gunniana*, however, is a Tasmanian). The praises of *O. macrodonta* and *O. nitida* have often been sung by West Country gardeners, and they are certainly the two most useful species. The popular *O. Haastii* is, of course, extremely hardy, but cannot vie with the others as regards beauty. *O. insignis* is, indeed, remarkable for the size of its broad thick leaves covered with a greyish bloom above and white beneath. *O. semi-dentata* with mauve florets is very charming, but, like many of the Chatham Island plants, seems to be more difficult to establish in many gardens than other *olearias*.

The shrubby **SENECIOS** are useful grey-foliaged plants of which *S. Greyii* is the commonest in cultivation. A much more striking representative of the composite is *Brachyglottis repanda*, which makes a very handsome shrub in the open in the West of England. The leaves are large and soft, dull green above, white beneath, as is the rule with so many New Zealand shrubs. It produces large terminal panicles of whitish flowers, especially after a hot season when the wood has been well ripened.

N. G. HADDEN.

## A FINE CLEMATIS

BY E. H. WILSON.

ONE of the most beautiful plants that blossom in the autumn is the climbing *Clematis paniculata*, much too rarely seen in British gardens. Possibly England does not enjoy enough sunshine for this plant to give of its best, yet it is so beautiful that it ought to be given further trials and especially in the sunnier parts of the British Isles. On this side of the Atlantic it is one of the most popular climbing plants, never failing in the autumn season to put forth its flowers in countless thousands. A vigorous plant it will grow, full 30ft. or more, forming a thick tangle. Dark, lustrous green through the summer, and a garland of pure white through September, this clematis is to be seen in nearly every garden. In many places it has escaped and become naturalised. The flowers are pure white, delightfully fragrant, each about an inch across, and produced in paniculate clusters from the axils of the current season's growth. The three to five partite leaves are a dark lustrous green and from early summer to late autumn this plant is a thing of exquisite loveliness. Festooning pillars or porches or rocks, it is one of the most beautiful of hardy climbing plants.

A native of the Orient, *C. paniculata* was introduced into cultivation from Japan by the Russian botanist, Maximowicz, about 1864. The Arnold Arboretum obtained seeds of it from the Botanic

Garden, Petrograd, in 1877, and the plants raised from these seeds were the parent stock of the many millions now grown in America.



CLEMATIS PANICULATA ON AN OLD SUMMER HOUSE IN MASSACHUSETTS.



# SAXIFRAGES NEW OR NOTEWORTHY

THIS IS ONE OF THE LARGEST OF ALL FAMILIES IN THE GARDEN, SO THESE NOTES BY A PRACTICAL GROWER SHOULD BE OF GREAT ASSISTANCE TO READERS OF "THE GARDEN."

MANY new varieties have been added to the various sections of this popular and important family of alpine plants. While some, though good, are not a great improvement on older and consequently better known kinds, others have proved to be of exceptional merit in more ways than one, and are especially fine when grown as specimens in an alpine house or cold frame, the former, of course, for preference. Such a convenience is not absolutely necessary, but with it perfection can really be attained and enjoyed to the full, particularly so with the Engleria and Kabschia sections, as inclement weather conditions so often prevail at their flowering season; birds and slugs also feed on the blossoms and mar their beauty to a considerable degree. Under cover these annoyances are overcome and the full beauty of both flower and foliage is brought out perfectly. The latter alone being a source of pleasure, perhaps more so at this time of the year when it is at its best. By these remarks I do not wish to convey an impression detrimental to the uses of such an accommodating family of plants in the rock garden.

*SAXIFRAGA COTYLEDON PLATYPHYLLA* is undoubtedly the giant of the encrusted group, having handsome rosettes almost 1ft. across when well grown. The leaves are very broad and finely toothed, while the immense arching stems, clothed with sprays of snowy white flowers, attain under good cultivation 4ft. to 5ft. in length. Flowering in June, they remain in perfect condition for weeks on end.

*S. DR. RAMSEY*.—Those who know this superb variety will, I think, agree that it is one of the best if not the finest saxifrages of its kind ever introduced. It is beautiful both in flower and foliage. The individual flowers are large and well formed, the colour being clear white with rich red spots. The spikes are about 1ft. in height, evenly balanced, without the rather dense heads so characteristic in some varieties of this section. Its whole habit leaves little to be desired, almost every rosette terminates in a beautiful flower-spike in June.

*S. LONGIFOLIA*.—This handsome species is too well known to dwell upon, but impossible to pass over. Suffice it to say that its symmetrical spikes of white flowers are exceedingly attractive, that is when it does condescend to throw up its spike, which it assuredly will in spite of one's efforts to prevent its doing so. Personally, I regret the appearance of such, for it means the loss of a specimen which with care will attain almost huge dimensions as far as this class of plant is concerned. In leafage no other member of the group is comparable. Fortunately, young plants of it are cheap and easy to procure.

*S. FLORULENTA*.—Owing to the recognised difficulty in the cultivation of

this pink-flowering species from the Maritime Alps it is seldom seen. Naturally, no grower cares to admit defeat, and such a plant as this usually

*S. ARCO-VALLEYI* was sent us by Messrs. Tucker and Sons of Oxford, and is included by them among the Engleria group and described as a red



ONE OF THE MOST STRIKING OF SAXIFRAGES, *S. GRISEBACHII*.

adds to his incentive to succeed. It is of importance to place it in a vertical position and at all times handle with respect. Bearing these two points in mind anyone hardened to these difficult creatures might reasonably hope to be successful.

The Kabschias have, I think, grown the richest of any section, and as these are of easy culture perhaps it is as well that it should be so.

*S. HYBRIDA H. MARSHALL* (*Burseriana floribunda* × *lilacina*) is the first of the new ones to flower here in the North, that is, about the middle of March, about the time that the well known *Irvingi* is past its best. The flowers are pale pink, of good substance, borne singly on erect 3in. stems above a dense grey-green foliage. Another desirable form from the same cross, called *S. hybrida Gem*, is very similar excepting that the flowers are much more reflexed and fully a fortnight later. The varieties *Amitie* (*lilacina* × *dalmatica*) and *Etheline* (*Tombeana* × *Burseriana crenulata*) are worthy of mention. With the introduction of these new hybrids by Messrs. Maurice Prichard and Sons of Christchurch the particular shade of pale pink first brought out in *S. Irvingi* has been considerably lengthened, a valuable asset where the decoration of an alpine house has to be kept in view.

hybrid, but the plant here is totally different, appearing nearer to the Kabschias with flowers of rich lilac, large, round and well formed on 3in. stems, the petals overlapping as in *S. Faldonside* and remain in perfect condition throughout April and well on into May, the colour improving with age. Undoubtedly it must be in the first dozen of a large collection here at Dupplin Castle.

*S. MYRA*.—I can but endorse the general praise accorded to this remarkable cherry red hybrid, and I only hope that the form *coccineum* will turn out to be as stated, "an even richer form."

*S. RIVERSLEA* (*Frederici-Augusti* × *lilacina*) forms silvery hillocks of rosette-like growth and has flowers of a purplish hue early in February. A somewhat similar plant but with much richer flowers received an award of merit from the Royal Horticultural Society in March, 1923, and is called *S. Valeria Keevil*.

*S. GRISEBACHII* (*WISLEY VARIETY*) is to my mind the most handsome of the Engleria both in its foliage of hard silvery rosettes which on specimen plants measure 2½ins. across, especially beautiful in appearance. The flower-spikes, which appear in spring, are very striking and curious, clothed as they are with purplish crimson and green-tipped bracts.

J. T. HARRIS.



# SOME NEW ROSES OF 1923

BY HERBERT C. WETTERN.

A CRITICAL LIST OF ROSES OF 1923 WHICH HAVE BEEN TESTED IN THE AUTHOR'S GARDEN.

It can well be argued that it is hardly a fair test of a new rose to try one plant of each variety, but at any rate some experience is gained thereby, even if the observation of a second year is essential to confirm one's first impressions.

Admittedly better, or more decisive tests can be made, for example, in the Royal Horticultural Society's Test Garden at Wisley, where half a dozen plants of each new variety are tried, and even better experience can be gained by the combination of the two efforts.

Variations in soils, in climate, in situation—all these factors admittedly can affect the results, and emphasise above all the advisability of making such tests in different places and under varied conditions. As an example, we find that Messrs. Alex. Dickson's roses from Newtownards make little success here as compared with the roses from their Marks Tey

**Betty Hulton**, H.T. (Alex. Dickson and Sons).—Clara Curtis type. Nice habit with vigorous growth. Large pointed bud, clean yellow blooms, which open freely in all weathers. Height 15ins., dark foliage. An excellent new variety, suitable for massing in beds, and most blooms good enough for exhibition. A very promising rose.

**Captain F. S. Harvey Cant**, H.T. (Frank Cant and Co.).—Good grower. Blooms pale pink, hardly salmon as described, with yellow base. The blooms are large and of great substance, carried on erect stems. Height 18ins., large foliage. Should be an excellent exhibition rose, though perhaps rather heavy for a bedder. Gold medal N.R.S.

**Captain Ronald Clerk**, H.T.—Also catalogued as a pernetiana. Splendid grower. Although the growth sprawls, the blooms, being light, keep well off the ground. Wonderful vermilion red blooms with orange base. Height 24ins., good foliage, sweet scented, fine autumn blooms. An attractive garden and decorative rose.



BETTY HULTON, WITH CLEAR YELLOW FLOWERS.



A NEW CORAL PINK H.T., MRS. TRESHAM GILBEY.

Nurseries. The latter, coming from a heavy soil on to our light sandy loam soil, always do well. The reason is not easy to explain, but it is a fact, nevertheless.

Our inglorious summer—if such it can be called—has been far from ideal for testing plants of any description—above all roses. The sun certainly shone in June, but thereafter it has almost been continuous wet throughout the country, a condition calculated of itself to damp the enthusiasm of the most ardent rosarian, while affording the poorest opportunity for the plant to put forth its best efforts.

The results, therefore, set out hereafter really form a record of observations made under these difficult conditions, and must be accepted as subject to future experience, producing evidence which will confirm, or even in some cases directly contradict, the tentative conclusions so far reached.

**Barbara**, H.T. (W. E. Chaplin).—Catalogued also as a pernetiana. Strong grower, free bloomer. Bright red blooms with yellow base, and yellow reverse of petals. Semi-single, height 18ins., foliage good. A very bright bedding rose and a striking novelty.

**Courage**, H.T. (S. McGredy and Son).—Good growth, not too rank. Large blooms, dark red, described as similar to old H.P. Duke of Wellington. A good description, too, for colour and growth, but has a freedom of bloom as with the modern hybrid teas. Blooms are a good shape, large and full. Very fragrant, height 18ins., foliage good, large leaves, good autumn blooms. A very promising bedding rose.

**Earl Beatty**, H.T. (W. E. Chaplin).—Strong growth, but "stubby." Blooms are deep crimson, very fragrant, but discolour somewhat when old, and do not keep their shape well. Height 15ins., foliage, large leaves.

**Evelyn Murland**, H.T. (Alex. Dickson and Sons).—Growth none too strong and rather sprawly. Deep pink blooms suffused orange. Height 24ins., foliage good, small leaves, good autumn bloomer. Warrants another year's trial to try to get better growths.

**Florence L. Izzard**, H.T. (S. McGredy and Son).—Good growth, though somewhat thin. Free bloomer, very bright yellow blooms and pretty buds. Height 24ins., foliage good, good autumn blooms. It should make a magnificent bedding rose. Mr. McGredy set too high a standard with Golden Emblem and Mabel Morse and this is hardly equal to either for size or shape. Gold medal N.R.S.



**Hawthorn Scarlet**, H.T. (Alex. Dickson and Sons).—Growth not very strong, or is it that Newtownards plants do not do so well on our soil as those from Marks Tey? Bright scarlet blooms, sweetly scented. Continuous bloomer, height 24ins., foliage good. Gold medal N.R.S.

**Jacqueline**, Hybrid Briar (W. E. Chaplin).—Also described as a pernetiana. Very strong bush, too big for bedding, more a shrubby rose. Semi-double blooms, reddish copper, with yellow base. Splendid autumn blooms, big trusses. Free flowering, height 42ins., foliage good. Award of merit R.H.S.

**Lady Dixon Hartland**, H.T. (B. R. Cant and Sons).—Strong growth. Large blooms, deep shell pink colour, suffused orange, which last well when cut. Height 21ins., foliage good. A most promising bedding rose, giving splendid autumn blooms.

**Lady Roundway**, Pernetiana (B. R. Cant and Sons).—Strong, but stubby growth. Blooms not large. Clear copper chrome colour. Height, 15ins., good bronze foliage, continuous and free flowering variety, suitable for massing. Gold medal N.R.S.

**Lord Allenby**, H.T. (Alex. Dickson and Sons).—Growth not strong. Scarlet crimson blooms, rather flat, though with plenty of substance. Height 12ins., foliage good. Must try it again in hopes of better growth.

**Maud Cuming**, H.T. (? Pernetiana) (Alex. Dickson and Sons).—Unfortunately this also has not grown strongly here. Blooms are pinky peach colour, so far not of much size. Height 15ins., foliage good, good autumn blooms. Recommended as suitable for exhibition, decorative and garden purposes, which we shall be better able to judge after another year's trial.

**Mrs. Courtney Page**, H.T. (S. McGredy and Son).—Strong growth and good shapely plants. Excellent buds. Bright blooms, cerise to carmine shade. All blooms come a good shape. Sweetly scented, height 21ins., foliage fair. Gold medal N.R.S. Claimed to be one of the most superb roses ever raised. *Nous verrons*.

**Mrs. Tresham Gilbey**, H.T. (W. E. Chaplin).—Very good growth, strong and erect. Long pointed buds resembling *Admiration* in colour. Blooms coral rose pink. Height 24ins., foliage good, good autumn blooms. Gold medal N.R.S. Although recommended for exhibition, it is hardly heavy enough.

**Nur Mahal**, Hybrid Musk (J. H. Pemberton).—Bushy growth. Wonderful mass of very profuse bloom. Pink blooms, which lose colour



VESUVIUS, A FRAGRANT AND VIGOROUS AUTUMN CROPPER.

somewhat on maturity. Height 24ins., foliage small but good, splendid autumn blooms.

**Orange King**, Dwarf Poly. (Wm. Cutbush and Son).—Growth good. A novel break of colour, orange, but not the colour of a rose. Inclined to break away from its true colour. Height 15ins., foliage good, good autumn blooms.

**Rosabel Walker**, H.T. (Frank Cant and Co.).—Shapely growth, making excellent bush, and would probably succeed well pegged down. Bright crimson blooms, fragrant, though flat, height 24ins., good autumn blooms. Awards of merit N.R.S. and R.H.S.

**Salmon Queen**, Dwarf Poly. (Wm. Cutbush and Son).—Growth like Orange King. Blooms slightly pinky-orange. Height 12ins., foliage good.

**Scarlet Bedder**, H.T. (Jersey Nurseries, Limited).—Origin, General McArthur × Hugh Dickson. Strong bushy grower, similar to General McArthur in shape. Scarlet blooms, but they blue off. Height 24ins., foliage good.

**Sea Spray**, Hybrid Multiflora (J. H. Pemberton).—Summer-flowering rambler. Strong growth. Poor blooms, pink and white. Height 30ins., foliage excellent, no autumn blooms.

**Vesuvius**, H.T. (S. McGredy and Son).—Shapely plants. First crop blooms none too free, but makes up for it with autumn crop. Single, scarlet crimson, good colour, and keeps its colour too. Very fragrant. Resembles Princess Mary, but darker. Height 24ins., foliage good. Certificate of merit N.R.S.

Foreign roses tried are as follows:

**Asun Galindez de Chapa**, H.T. (Ketten Frères).—Origin: Paul Lede × Jacques Vincent. Not a strong grower. Blooms rather small, but of a clean and pinky orange colour. Good autumn bloomer, but must be watched for mildew, height 18ins.

**Amelie de Bethune**, Pernetiana (J. Pernet-Ducher).—Good and neat growth, throwing up long shoots with excellent trusses of bloom. Blooms are large, bright coral pink colour and cupped in shape. Height 30ins., with bronze green foliage. Excellent autumn blooms, and should prove a good bedding variety.

**Etienne Rebeillard**, Pernetiana (J. Pernet-Ducher).—Hardly a strong grower. Blooms come semi-single of an ordinary pink colour. Height about 18ins., and the only redeeming feature about this variety is its excellent light green foliage.



A VALUABLE AND PROFUSE HYBRID MUSK, NUR MAHAL.



**Insulinde**, H.T. (G. A. van Rossem).—Origin: J. M. Jolles × Melody. Growth is good, but apt to sprawl somewhat. Blooms are not large and rather like Golden Ophelia, though a better shape. Bronze yellow colour, height 15 ins., foliage dark and good, autumn blooms disappointing, as colour is lost and in a wet season are apt to fade almost to white.

**Ian Steen**, H.T. (Jan Spek).—Origin: Dora van Tets × Grüss an Dresden. Dumpy growth and weak. First blooms rather shapeless, resembling Dora van Tets. Autumn blooms were better. Height 12 ins. Watch it for black spot, to which it seems liable.

**J. Bienfait**, H.T. (G. A. van Rossem).—Origin: Mme. Léon Pain × Red Letter Day. Good bushy growth. Blooms are semi-double, dark red colour. Height about 2 ins., foliage dark green, but seems liable to mildew.

**Yellow Bedder**, Pernetiana? (G. A. van Rossem).—Origin: J. M. Jolles × Mme. E. Herriot. Very strong grower, making a big bush. Bloom proved rather disappointing, yellowish white, in large trusses. A fine weather variety, under which condition it blooms profusely, and the colour is a cleaner yellow. Height 30 ins., foliage small, grass green colour.

Summarising, it is at least evident that there are some very promising new varieties, which have already demonstrated that they are real improvements on many which already exist, but, owing to the inconclusive character of the test, due to the really poor weather conditions, a clear judgment must be reserved until the results of another year's fair trial are known.

## PROPAGATION OF NOMOCHARIS BY SEED

BY L. B. STEWART.

THE raising of this wonderful Liliaceous plant is one that has been of great interest in the Royal Botanic Garden, Edinburgh, and more so after a conversation with Mr. E. H. M. Cox, as he told me that the bulbs of this plant were found 2 ft. or more deep down in the ground in its native habitat—so deep that it was a problem to know how the plant ever got down.

It is a well known fact among horticulturists that many bulbs have the power to raise or lower themselves according to their own requirements. But the movement in most bulbs is a slow process and it may take the bulbs years to adjust themselves.

In the year 1922 seed was sent to this country, and seed was presented to this establishment through the kindness of Mr. R. Cory. The seed was treated in two different ways. Two 4 in. pots of each kind were sown and placed in a warm pit, the temperature of which was 58° night and 65°–70° day. After germination had taken place the pots were then removed to a cooler house with a temperature of 55° night, 60°–65° day, with a nice moist atmosphere which just kept the seedlings growing. When the seedlings were ready for handling the first lot was allowed to continue growing, nothing being done to the seedlings until the fall of the year when the young bulbils had gone to rest and when they were transferred to a specially prepared frame with about 7 ins. of good compost and plenty of drainage. The second lot of seedlings on being big enough to handle were at once transferred to a frame specially prepared, and after pricking out, which consisted of putting into lines 4 ins. apart—the seedlings being 2 ins. apart—they were covered with sashlights and at night were covered with mats to prevent the temperature from falling too much, thus preventing a check in the growth.

The results of the two methods were as follows: The seedlings, which were kept in the pot until they had finished their growth, were very small but were uniform, and nearly every seedling was alive; whereas the seedlings which were handled when they were big enough were more unequal

in size, the smallest being about the average size of the ones kept in the pot. There was, however, a fair proportion which had attained the size of planting out in the garden. The reason for the two distinct sizes in the pricked out batch being due to the soft nature of these seedlings and that many of the seedlings had got damaged in transferring from the pot to the frame. The seedlings which suffered were the small bulbils. In some cases the leaves were broken, in others the roots were knocked off, but in each case the result was the same. The seedlings which were undamaged were the bigger ones.

The results of this experiment were found on lifting the bulbs this October. As regards the depth these bulbs had travelled down into the soil, in the case of the seedlings which were planted out in the frame from the pot where they had been left until they had finished their growth, they were found at a depth of 3–4 ins., the planting of the bulbils being in. at the back-end of 1922 and were of a uniform depth. The seedlings which were transferred from the seedling pot into the frame and kept growing were found to be very unequal in depth. The seedlings which were damaged had got down to a depth of 3–4 ins., but the undamaged seedlings had got down to a depth of 8 ins., and all the big bulbils were found down among the drainage. So that these seedlings had travelled from in. to 8 ins. deep between the early summer of 1922 and October, 1924. Now this travel or movement of the bulbs caused me to look minutely into the matter, and I found that the big bulbs went on rooting continuously from the base of the bulb, and that when one root had attained its full limit of growth and had done all the pulling it could do, its place was again taken by another root, and so on. The bulbs had a series of roots at all different stages of development, but shortly after a root had attained its full growth it began to die, the dying taking place in nearly every instance from the tip to the base. Thus the bulb was enabled to absorb the food material, thereby increasing in size. In the smaller bulbs it is a little more difficult to see this system, but in the case of the larger bulbs the movement is quite apparent.

## CORRESPONDENCE

### INVESTIGATION OF WINTER THUNDERSTORMS 1925.

SIR,—In conjunction with the Meteorological Office, I purpose to continue, during this season, the annual record of winter thunderstorms hitherto made by Mr. C. J. P. Cave of Petersfield: this can only be carried out with the assistance of observers in all parts of the country. May I, therefore, ask if any of your readers would be good enough to send me, on a post card or otherwise, a note of any thunder or lightning which may be observed between January 1st and March 31st, 1925, inclusive?

A simple note of the date and time of the occurrence of thunder and lightning in any place and the direction in which the lightning was seen, especially at night, would be very valuable. Any additional information would be extremely welcome: as for instance:

(i.) An estimate of the severity of the storm.

- (ii.) The time when the storm passed overhead, if it did so, and how long it lasted.
- (iii.) Whether it was accompanied by rain, hail or snow.
- (iv.) Direction and strength of wind; change of wind, if any.
- (v.) Whether there was a change in temperature during the storm.
- (vi.) Any other observation which may be of particular moment.

Reports from all parts of the country are desired, especially from Scotland, Ireland and the North of England.

On behalf of Mr. Cave, I should like to take this opportunity to thank very heartily those who last year made this investigation possible by sending their observations to him.—S. MORRIS BOWER, *Langley Terrace, Huddersfield.*

### INTERESTING TULIPS.

SIR,—To all lovers of tulips Mr. Jacob's article on page 773 (November 15th, 1924) must have

appealed. Never before were so many grown as now, and if observation counts for anything it is the Darwin that is most popular. He certainly sets our mouths watering by the glowing description of some of the latest, but I apprehend that the price will be prohibitive to anyone with a moderate purse, for a time. Catalogues do not often bring to our notice *Sunset* (rich orange), *Whistler* (deep blood red), *Grand Monarque* (plum purple), *Auber* (dark maroon), *Rev. H. H. D'Ombraïn* (vermillion) or *Arizona* (also a plum purple). These are all old varieties, and were never, so far as my memory serves, very tall in price. I remember well Mr. Jacob sounding the praises of *The Bishop*, a wonderful large purple Darwin, but its price is prohibitive to-day to most people, enthusiasts of tulips though they be. This is not popular owing to the fancy price asked, which, as far as I am aware, is kept up. Mr. Jacob would assuredly have shone as a distributor of special tulips, as he places their merits



before us in such a tempting way that one could scarcely resist making purchases!

He refers to the tulip mania. Many, of course, are aware that it occurred in the seventeenth century and was not confined to the Netherlands alone, but spread to France and Germany. It would, I think, be interesting to a number who are now taking up tulip culture to read an account of how the mania originated, and Mr. Jacob could tell the story in his own inimitable way.

I wonder sometimes whether Mr. Jacob, with his "inside" information from Dutch raisers, dare lead us to hope that we may one day see a deep yellow Darwin with the stamina and shape of Mrs. Farncombe Sanders?—CLAREMONT.

#### ORNITHOGALUM THYRSOIDES.

SIR,—In THE GARDEN of August 23rd, 1924, you published a letter about *Ornithogalum thyrsoides*, which I read with great interest, as I had one bulb of *O. thyrsoides* coming into bud at the time. I was watching it very carefully to see if it would perfect its flower or die in the bud, as it did last year. It has recently been in full bloom, a wonderful coppery golden colour, and so delicately beautiful that it was well worth all the care bestowed upon it. It is growing outdoors on a slightly raised bed of sandy soil, where it has been undisturbed for three years.—ELIZABETH LAW, Wellington, New Zealand.

#### WHEN IS A FLOWER MAUVE?

SIR,—May I be permitted to suggest that compilers of plant catalogues, people who write for the garden Press—in fact, gardeners in general—might be a little more discreet in their use of the description "mauve"? There is a growing tendency, and has been for some time, to call anything of a bluish lavender "mauve." *Viola Maggie Mott*, for example, is often described as being of that colour. Even the "periwinkle blue" of the vincas is called mauve by many. That this is wrong is manifest, for the word "mauve" is French for mallow, and means, as the dictionary tells us, "a mallow colour." We must, therefore, have a lot more red in the flowers we now call mauve if the latter term is to be used legitimately and much confusion is to be avoided.—A. T. J.

#### GENTIANA FARRERI.

SIR,—I enclose some photographs of *Gentiana farreri* and *G. sino-ornata*, taken in my garden in Perthshire last autumn. The *lilium* growing with *G. farreri* is *Philippinense* var. *Formosanum*, raised from seed ten

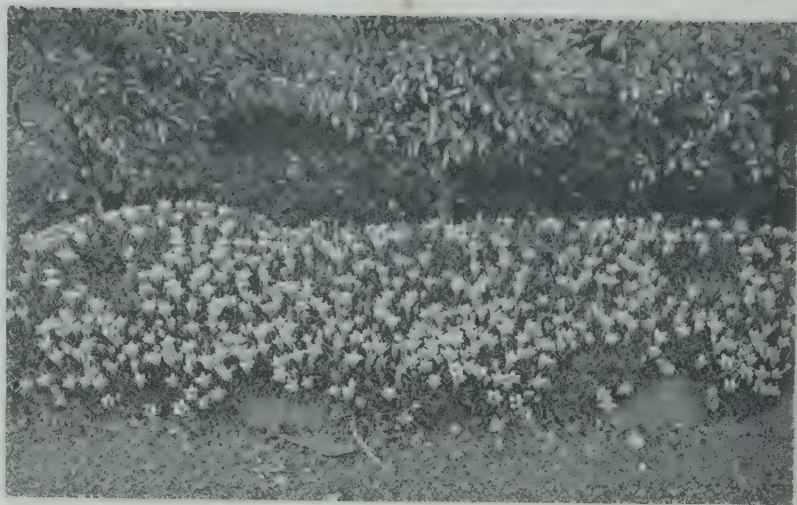
years ago. Mr. Grove wrote me some time ago saying this *lilium* was not a success in the South as it always got damaged by early spring frosts. With me it does not show above ground before the beginning of May and thereby escapes spring frosts. I think it was in 1923 that "Formakin" wrote to THE GARDEN saying that he could grow *Gentiana sino-ornata* like a weed, but could not flower it. I asked him to send me one of his plants to see if I could flower it, which he did, but there is not a single flower on it this year. I sent him a plant from my garden and when I saw him last week he told me it had flowered splendidly with him. This is rather curious as we both got the gentian from the same source. This gentian was raised from seed in Edinburgh and first flowered there in 1912. Is it possible that some of the seedlings are blind? On looking at a large patch of the gentian which was planted in a bed in the rose garden at Edinburgh, I find a good few of the plants making strong growth, but no sign of flowering, the other plants which looked very healthy but not so strong-growing were all flowering. It would be interesting to know if any other person found this gentian to be blind.—A. H.

#### EUPATORIUM WEINMANNIANUM.

SIR,—In THE GARDEN for December 6th, 1924, I was pleased to notice that Sir H. Maxwell, Bt., made a favourable reference to this useful and delightful plant. When on a recent visit to the Penzance district of Cornwall I saw several such specimens as described by Sir Herbert, they were in full bloom, and it is a shrub worthy of wider cultivation. Perhaps it is not so tender as we have been led to believe. Here at Castleford, Chestow, the extreme end of Gloucestershire, it has been in the open for several years, and each September and October it produces its masses of pinkish white flowers. Cuttings will readily form roots either in the spring or about August. In addition to being so useful for outside, it also makes an excellent pot plant, and examples in pots 8 ins. in diameter are very acceptable for the greenhouse or conservatory. When grown in pots good rich soil is needed, and when the receptacles are filled with roots liquid manure should be afforded about twice each week.—T. W. B.

#### CATALOGUE DESCRIPTIONS.

SIR,—Surely in his letter to you on page 823 (December 6th, 1924) Sir Herbert Maxwell misses the point of "Claremont's" letter. Sir Herbert lays it down that "any tradesman may reasonably expect a customer to know the sort of goods he wants to purchase," and if



WELL FLOWERED PLANTS OF GENTIANA SINO-ORNATA.

that is so, a bare list of plant names, with prices attached, would doubtless constitute the perfect catalogue. Such a list might suit connoisseurs, who possibly number five hundred all told in the kingdom; but it would be useless to the thousands who order their plants at random from catalogues and, consciously or unconsciously, are influenced by the printed descriptions of the various species and varieties. It is an axiom of the trader's faith that the more complete a catalogue can be made the better the business resulting from it, and there is already more than one instance of the truth of the axiom when applied to the nurserymen's trade.—AMATEUR.

#### THE SOUTHERN BEECHES.

SIR,—Re the excellent articles by Mr. Bean on the "Southern Beeches" (December 13th and 20th, 1924) He and other readers may be interested to know that a fine specimen of *Nothofagus Betuloides* is growing at "Kitlands," a Surrey place on the Leith Hill range close to the village of Coldharbour. The tree is about 35ft. high and perfect in symmetry. I first saw it twenty-one years ago and as it is now only a few feet taller than it was then, it would appear to be extremely slow in growth in this country.

As near as I can gather the age of the tree would coincide with the 1843 introduction by Sir Joseph Hooker, who was a frequent visitor to Kitlands in those days and who probably took the young plant there himself. I have never known this tree to produce seeds, and so far as attempts to propagate are concerned the boughs are too high to layer and cuttings have never succeeded. I once tried grafts on seedlings of common beech, they also failed.

The Kitlands specimen may be mentioned in one of the volumes of trees by Elwes and Henry. I remember, at his request, sending Mr. Elwes particulars of it some sixteen or more years ago.—S. W. PHILPOTT, Holmwood.

#### ROSA HISPIDA.

SIR,—One of the most beautiful single roses in cultivation is *Rosa hispida*. The sturdy, yet graceful, bristly stems are freely branched and during their flowering season form pillars of bloom a foot in width and 3ft. to 4ft. in length.

The flowers are borne at the ends of the lateral branches and are yellow at first, changing to creamy white, and from 2 ins. to 3 ins. across. The flowers much resemble those of *R. Hugonis*, but the foliage is very distinct from that species. *R. hispida* is also very hardy, whereas *R. Hugonis* growing alongside was badly cut during the past winter.

There appears to be some doubt as to the origin of this beautiful early-flowering single rose, which at one time was thought to hail from America, in which country it has not, however, been found wild, and its true home is thought to be Siberia.—E. M.



GENTIANA FARRERI WITH LILIUM PHILIPPINENSE IN THE BACKGROUND.



## NOTES FROM CONTRIBUTORS

### THE WINTER-FLOWERING PERIWINKLE.

**VINCA DIFFORMIS**, as this plant is called, is very cheerful at this season, for it comes into flower about mid-November and "carries on" until spring. Being a native of Southern Europe, it is perhaps not quite hardy, and one will, naturally, afford a plant that blooms in winter a well sheltered place. The latter can easily be found in most gardens, for this species seems to delight in being under the protecting boughs of an evergreen, and it is an ideal woodland garden plant. Hard frost may, even in such circumstances, destroy the flowers, but the plant is so recuperative that a fresh crop will be produced as soon as the weather becomes milder.

This periwinkle has the same habit and appearance as *V. major*, but it is not nearly so aggressive as the latter can be. The flowers are rather smaller than those of the great periwinkle, and the lobes of the corolla are sharply pointed to one side. What the colour of the type species (if there is one) should be I know not, for *V. difformis* is variously described by writers of authority as having blossoms of "grey," "delicate mauve," "clear lilac" and "clean blue." One of my own plants has struck out for itself, for it is as white as a snowdrop in shade and suffused with the most delicate tint of starch blue in full sun, while another is a very pale washy lavender. Some writers differentiate between *VV. difformis*, *acutiflora* and *media*, but Mr. W. J. Bean ("Trees and Shrubs") appears to consider all three one and the same thing. The probability is that they are all geographical forms of the one species, some coming from Spain and Northern Africa, others from Italy and the eastern shores of the Mediterranean.—A. T. J.

### THE TREE OF HEAVEN (*AILANTHUS GLANDULOSA*).

AMONG the many attractions of Paris are the fine trees which make her streets, avenues and boulevards a glory in the spring and places of welcome shade on hot summer days. The catalpa trees on the Quai d'Orsay are worth crossing the Channel to see in May; the splendidly grown chestnut trees in Avenue Henri Martin are lovely in spring and interesting in autumn, since several of them blossom again regularly in early September.

The beautiful trees of many varieties which are planted in the gardens which line the Avenue du Bois de Boulogne and those of the Champs Elysées (especially the magnolias of the Rond Point) are a delight all the year round.

Among the most interesting trees in Paris are the *Ailanthus glandulosa* which are planted on both sides of the Avenue de Wagram as well as in some of the boulevards.

These rival the plane trees as sturdy town-dwellers and are extensively planted in the streets of Continental cities. According to French authorities, they are extremely hardy in all situations, are content with poor soil, and bear intense cold and prolonged drought equally well.

The *ailanthus* is a native of Japan and China. In those countries it is planted round pagodas and temples, hence its name, which means "tree of the gods." The French call it "*ailanthe*" and "*Vernis du Japon*," and the Germans "*Götterbaum*." These trees grow rapidly and reach a great height, one of 60ft. being not unusual. The French top the lateral branches of the *ailanthus* every year, with the result that its trunk elongates and its branches spread out in an umbrella shape, thus giving a grateful shade in summer.

The wood is much used for furniture making. It is satiny in texture, yellow in colour and takes on a beautiful polish. The

only insect which feeds on its leaves appears to be *Bombyx Cynthia*, and that but sparingly.

This constitutes another great advantage to the tree for ornamental uses, since its leaves are always healthy-looking. These are pinnate and are from 2-2½ft. long. They are formed of from ten to fifteen pointed leaflets, light green above and white beneath. The bark is a dark grey. The flowers are green and have an unpleasant odour. The fruit, a yellowish green samara, adds to the attractiveness of the trees in autumn. The leaves remain on the trees until the first severe November frost. Then the leaflets drop off suddenly all at the same time, leaving the bare petioles which remain on the trees for weeks longer.

A sugar is obtained by tapping the trunk of the tree. Some authorities aver that this is a cure for general debility, but there seems good reason to doubt this statement.

The Tree of Heaven is not extensively grown in England, which is a pity, as it would make a pleasing change to the everlasting plane trees in our great cities. Could not some of these trees be planted in the streets of the new settlements of hideous little houses and bungalows which are disfiguring some of England's most beautiful country?

The *ailanthus* grows so fast—often one to two yards in a year—that it would soon tone

well foliated stems carrying a number of exquisite recurved yellow flowers of great substance. It is generally recognised that this is one of the most satisfactory of all garden lilies. One of our highest authorities on lilies advocates planting sins. deep, but the writer practises deeper planting than that, and has yet to learn that the shallower method is the better and more beneficial to the welfare of the plants. This old garden lily seems to have a liking for lime, but this is not essential. A good deal has been said about the spots on the flowers, and an endeavour has been made to discriminate between the plants with or without spots, but no satisfactory conclusion has been come to on the point. There is hardly, however, a really poor variety of *L. monadelphum*, and those who have it not will be well advised to procure it this season and plant it either in the mixed border, the lily bed or the front of the shrubbery, where it looks well against the greenery about it.—S. ARNOTT, *Dumfries*.

### LEAF CATERPILLARS.

SIR,—Readers of THE GARDEN may be interested in the two enclosed entomological subjects which are herewith shown. One shows a group of buff tip moth caterpillars in their early stages of growth and the other a poplar hawk moth caterpillar from which



HARMFUL AND HARMLESS CATERPILLARS ON OUR NATIVE TREES.

down these hideous collections of buildings and by giving them its beauty deserve in another sense its name, "Tree of the Gods." —VICTORIA SLADE.

### LILIUM MONADELPHUM.

HERE I have two varieties of *L. monadelphum*, which are wonderfully variable. The first of these expanded its earliest blooms on June 18th, while the other one, which has been longer in my possession, did not open much before the end of the same month. I have been more fortunate than many, as it was not long after removal to this garden that my bulbs began again to flower, resentful as they are of disturbance. In both cases I am thoroughly well satisfied with their conduct, and their beauty is so wonderful as to be a great pleasure for one to study. The first to flower I received as the variety *Szovitzianum*, I believe, but there seems to be so much confusion in both names and description that one becomes increasingly diffident in saying which is this form and which is the one called the type. In any case, these are truly charming lilies of most impress effective in the border, growing in some few places as much as 6ft. high and with

ichneumon fly caterpillars have just emerged to pupate and eventually become perfect insects. Buff tip caterpillars are very destructive to birch, lime, willow and oak trees, and it seems a pity that the ichneumon fly had not missed the poplar hawk, as they are comparatively harmless. The "balance of Nature" appears to have gone wrong in this instance.—C. LACEY.

### HELLEBORUS FÆTIDUS.

NO plant in the garden at this time can surpass in beautiful leafage that of our wild hellebore, and if for no other reason a few clumps are to be encouraged in the woodlands or the less important positions of a shrubbery. *Helleborus fætidus* is listed to flower in March, but with the protection of shrubs and trees it will flower in February in any but the coldest of gardens. The flowers are not attractive as such, being of a greenish shade and unpleasant to smell; but, as above stated, the elegant leafage surrounding the bold 18in. high flower stalks is so striking that one quite forgets or is willing to overlook the less distinguished blossoms. Another wild species suitable for planting in woodlands is *H. viridus*.—C. TURNER.



# A WANDERER'S NOTE BOOK

## THE VENETIAN SUMACH.

THE very splendid *Rhus Cotinus* pictured on page 613 last year (and also, as an unusual standard, on page 575) takes me again to the shores of Lake Garda, where it constitutes the undergrowth of the woods and reaches beyond the woods to the open lakeside. In his book, "My Garden in Summer," Mr. E. A. Bowles is querulous with the Venetian sumach, in that in England it did not produce its fluff-heads in such abandoned fluffiness as in its home on Lake Garda. The two photographs reproduced in THE GARDEN suggest that Mr. Bowles had been unfortunate, for Lake Garda has nothing finer to show. Is the sumach, whose blood scarlet leaves in autumn encarnadined two miles of the valley of the Roja near Tenda in the Italian Maritimes when Reginald Farrer was preparing his book, "Among the Hills," the same species? If so, the Garda woods in autumn must out-scarlet the Roja, even as the Roja was out-scarletted for Reginald Farrer by the alpine rhamnus on the Forcella Lungieres above Misurina in the Dolomites.

## OLEANDERS ON LAKE GARDA.

The note from Greece (page 767, November 8, 1924) must excite the envy of the flower—and sun—worshipper. The description of the oleander growing wild on cliff faces reminded me of the beautiful pink splodges on the precipices at the northern end of Lake Garda last June, which, viewed from the boat through glasses, puzzled me as to the identity of this superb "rock bush" until a stray seedling or two, dropped from on high to the water's edge, came so close as to settle the question. With only slight exaggeration one might say that the entire lake is rimmed with an oleander circle, but the sub-spontaneous compact bushes of the limestone precipices were more charming, and an even greater feast of colour, than the more usual but more formal, regularly spaced standards.

## NAMES.

What's in a name? To me, as a wanderer, a lot. I like a name to be descriptive. It aids the memory and charms by recollection. I had lief the great botanists of old had had more regard for the useful principle of association of ideas. But botany started before Pelmanism. The primula called Juribella demands no mental effort to recall its local habitation; and once the Gibril Alp enters your memory you are there in your dreams, with the sweet savour of the mountain tang in your heart, the more poignant for the little bitterness that you may never roam its care-free turf again. If ever I am shipwrecked on the Balearic Isles (no other chance I imagine can take me there, unfortunately), I shall know that *Primula acaulis balearica* lives there—the white primrose of the Balearic Isles. The beautiful deep golden auricle whose leaves are brilliantly outlined with a clear-cut white *ceinture* is more fittingly "albo-cincta," more correctly "Bauhini." Who or when was Bauhin or Bauhinus, and in what way should so ugly a name conjure up so charming a rosette, which, when first you fall in with it in the Tombéa district, leaps to your eyes as albo-cincta, and requires no late burning of the hotel electricity over botanical tomes to arrive at its identification? *Primula Balbisii* is a mental strain, but *P. auricula ciliata* explains its own leathery auricle leaves with hairy fringes. *P. marginata* is, of course, the beauty of the Maritime Alps, with broadly-margined and indented leaves. When first you see *P. minima*, you know it can be nothing but the least in stature of all the primulas. You do not seek *P. cottiensis* elsewhere than in the Cottian Alps. *P. Berninae* takes you at once to the magnificent clear-coloured viscosa of the Bernina, where you successfully seek it in the upper reaches of the Heuthal.

## THE HYBRID GEUM RHÆTICUM.

I imagine that, with many of the hybrid saxifrages, their ease and greater beauty make them *personæ gratæ* to their august collectors; but, as the greatest of rock garden apostles would have written, their origin is for the most part "wropped in a myst'ry." The roses offer another noteworthy example—from among the geums—of the value of hybrids. In early July I had admired the quite impressive abundance, floriferousness, size of bloom and clear

golden yellow colour of both *Geum reptans* and the more common *G. montanum* on the Pordoi Pass, halfway from Bolzano to Cortina; and on the Italian side of the Stelvio, *G. reptans* could not have been bettered. I knew of the existence of their offspring, *G. rhæticum*, and the Pordoi appeared a likely place whereon to fall in with it; but the search yielded nothing. Later, I was prospecting the vast rocky delta that stretches out between the Cambrena glacier and the Lago Bianco fronting the hospice and the railway halt on the Bernina Pass. My excuse is that owing to the damming of the lake for the enlarged electricity works near Poschiavo, it took an unconscionable time to outflank the lake. Also the season was late and there was little to show in the way of blossom. Yet again, I had spent a longish time encircling in wonderment a vast rock as high as a cottage and longer than many cottages, that was thatched throughout its length with *Primula hirsuta* just out of flower. Next time, if a little earlier, I shall break my journey to pay my respects to that rock. Wherefore, for all these reasons, I merely noted that the Cambrena delta was remarkable for abundance of *Geum reptans*, nearly all in seed, and did not pause on my way. It was not till the other day that, in re-perusing M. Correvon's "Flore Alpine," I was stabbed with the realisation that not only is the Cambrena glacier the richest known station of *G. reptans*, but also that all that *G. reptans* is the particular form of it known as *G. rhæticum* of Brügger. Both *montanum* and *reptans* are starred selections for the rock garden. 'Ware *montanum*'s tendency in rich soil to go to leafy hummocks and little flowers. Of *reptans* it is enough to say that doctors disagree. Some say moraine, others say no; some say rich feeding, others sandy poor and stony soil—a grievous medley, for *reptans* is the bigger, finer bloom. But *rhæticum*, the hybrid, combines the ease of the one with the splendour of the other.

## THE MEETING PLACE OF PRIMULAS.

Primulas (and other plants, like the mountain lilies), are strangely local in their distribution. One valley, one species, is only an exaggeration; and it is on the windswept cols that separate the valleys that you find the hybrids. It is on the top-most cols of Judicaria that you find the meeting-place of the European primulas. To continue my diatribe on names, does not "œnensis" lack all inspiration and meaning? But *Primula villosa daonenis* (disowned though the name be now), is at once a description and a guide to the Val di Daone; or "stelviana," equally denounced, would make you sure of catching the sunlit ruby flash of it on the rocks bordering the motor road just where it dips below the war-desolated Stelvio Pass on its coil-like way down to deep Bormio. Does the characterless name of *P. Facchini* resurrect at this date the memory of a forgotten botanist more than Porta's name of *Magiassonica* honours this primula's home in the Val Magiassone? *P. Heerii* is very nearly unpronounceable, but *P. integrifolia gavarnensis* gives you the entire-leaved primula of the Cirque de Gavarnie in the Pyrenees, for the photograph of which (on page 435 last year) I must not omit to compliment THE GARDEN. Who was Dumoulinus that he should give his name to a primula that Gusmus called *fratensis* (from the Frate di Breguzzo) or *Valbonæ* (from the Malga Valbonæ in the same district). Where then are these little-known valleys and cols of strange names? Once you leave Switzerland by the Stelvio gate you pass south-east through the Judicarian Mountains that cluster round the peak of Adamello, on whose high passes the species meet from the four quarters of the primula world—from the West, from the Bergamasque and Bernina Alps; from the North, from the Stelvio and the Austrian Tyrol; from the long Eastern lines that stretch through the Dolomites to Carniola, Styria and Idria; and from the South, from the famous Tombéa and over Lake Garda to Monte Baldo, the botanist's Mecca, and so to the uplands of Venice. The Stelvio, the Frate di Breguzzo, the Val Magiassone, the Malga Valbonæ, the Val di Daone and the Tombéa form the primula high road in early June through this little known territory. The long jagged crest of the Tombéa, whose primulas threaten to oust all other vegetation, makes a final mass effect with *spectabilis* and *albo-cincta* to a route that commenced on the Stelvio with *glutinosa* and *œnensis*.

E. ENEVER TODD.



# GARDENING OF THE MONTH

## FLOWER GARDEN.

ANNUALS.—Double dig the site.

BULBS.—Keep soil round them well hoed.

HERBACEOUS BORDERS.—Tread the surface firmly round newly planted perennials after a thaw.

PROTECTION.—See that the straw has not become sodden, so excluding air from the roots.

SWEET PEAS.—Prepare site by bastard trenching a strip of ground. Add plenty of decayed manure in the second spit and a little in the first. Give a dressing of wood ashes within 6ins. of the surface and add 2lb. basic slag and 1lb. of kainit for every 30ft. of the trench.

FRAMES.—Ventilate carefully, protect with mats, water plants only when dry.

## HARDY FRUIT.

BLACK CURRANTS.—Cut back hard one year old bushes.

FEED liberally with a mulch of manure fruit trees and bushes in full bearing.

PESTS AND DISEASE.—Continue spraying with caustic alkali or Woburn wash. Paint any wall fruit infected with American blight with a solution made by dissolving 4oz. of soft soap in a gallon of hot water and adding 1oz. of carbolic acid. Treat small attacks of American blight with this liquid and apply with a stiff brush.

PLANTING.—Continue with bush fruit in good weather.

PRUNING.—Continue whenever possible. Dress with tar the surface of any large cut. Burn prunings, mix ashes with loam and manure and return to the soil as a top-dressing.

RASPBERRIES.—Mulch bed at end of month with farmyard manure.

ROOT PRUNING.—Finish soon.

SOIL.—Prepare site for wall fruit. Drain the soil by placing a layer of broken bricks at a depth of 3ft.

VINES.—Prune and paint with Gishurst's compound. Top-dress the border with a compost of loam, mortar rubble and bone-meal.

## VEGETABLES.

GENERAL.—Continue trenching and double digging the ground. Give a dressing of quick-lime to the soil.

BROAD BEANS.—Sow on a warm border.

CELERY.—Protect by covering ridge with dry straw.

POTATOES.—Set in an upright position in trays a sufficient number for early supplies. Place for sprouting in a light frost-proof shed.

## SHRUBS AND TREES.

CLEAR from shrubberies and from under trees all leaves and dead wood.

PLANTING.—Finish in good weather.

PROTECTION.—Examine. Continue to cover tender climbers and shrubs during bad weather.

## GENERAL WORK.

RECONSTRUCTION.—Continue the work.

LAWNS.—Finish re-turfing and draining. Brush regularly and roll once a week.

STORE loam, manure and peat moss litter.

WALKS.—Roll, renovate and weed. Examine drainage.

## FLOWERS UNDER GLASS.

ANNUALS IN POTS.—Give final potting in 6in. or 7in. pot. Compost 2 parts loam, 1 part cow manure, 1 part leaf-soil and 1 part sand. Water with care after potting. Feed well with liquid manure.

ARUMS.—Feed continually, using weak doses of soot water and cow-manure. Give guano or Clay's fertiliser occasionally.

BEGONIAS.—Stake Lorraine type and keep in a temperature of 60° at night. Take cuttings of this kind. Sow tuberous-rooted

summer begonias at the end of the month. Use shallow pans and very fine soil. Sterilise the soil with boiling water before sowing. Mix seed with sand, scatter thinly and do not cover. Cover pans, shade and place in a temperature of 60° at night. Start old tubers at end of January in boxes 3-4ins. deep. Just cover the bulbs and put in a warm moist temperature.

BOUVARDIAS.—Feed well just before flowers open.

BULBS.—Bring into the house from the plunging ground as they are ready. Gradually raise temperature to 60° at night. Keep in darkness for a short while. Dry off gradually those which have finished flowering and stand in frames.

CALCEOLARIAS.—Give final potting at the end of the month. Put a little charcoal over the crocks. Do not bury the basal leaves. Dust with tobacco powder and guard against green fly. Water very carefully after potting, for if the new ball of soil becomes saturated the roots will not take to it.

CARNATIONS.—Strike cuttings, taken from the middle of the plant, round the edge of pots. Use a compost consisting chiefly of sand, and press firmly. Put in a mild propagating case with bottom heat. Pot up immediately they are rooted. Guard against damp.

CHRYSANTHEMUMS.—Continue to take cuttings. They do not require bottom heat. Place in a propagating case, and remove condensed moisture daily off the glass. Pot up early struck cuttings in a compost of 2 parts loam, 1 part leaf-soil and little sand. Place them in a temperature of 50-55° Fahr. at night.

CINERARIAS.—Pot on in a compost of 2 parts loam, 1 part leaf-soil, 1 part cow-manure and plenty of sand. Dust undersides of leaves with tobacco powder if green fly present. Keep down attacks of leaf-mining maggot by killing the grub.

CYCLAMEN.—Prick off from seed-pans into boxes, water carefully and keep on the dry side and in a temperature of 50-55° at night.

DIELYTRA SPECTABILE, POLYGONATUM MULTIFLORUM AND DORONICUM.—Pot up and bring into a warm house for forcing. Increase temperature gradually to 55° at night.

EUPHORBIA PULCHERRIMA.—When flowers have finished put pots under staging for a period of rest. Give drier conditions to those coming into flower and protect from cold draughts.

FREESIAS.—Dry off after flowering.

FUCHSIAS AND HELIOTROPE.—Take out resting plants, pot up, bring into heat, syringe, and take cuttings from the ensuing growths. Give a little bottom heat to cuttings.

GLOXINIAS.—Pot up those started in leaf-soil last month.

HYDRANGEAS.—Repot old plants. Bring young plants in batches into gentle heat, water and give a moist growing temperature. Compost for potting fairly rich and containing no lime.

LILIUMS.—Top-dress L. longiflorum with dried cow-manure and sifted soil. Raise temperature to 55° at night if required early. Pot up L. auratum and L. speciosum and place in a frame. Put three bulbs in each 9ins. pot, and only half fill the pots. Do not water until the roots have started.

LILY OF THE VALLEY.—Bring in for forcing another batch from the plunge.

PELARGONIUMS.—Increase the temperature of summer-flowering varieties. Pot on when necessary.

SEEDS.—Sow in pans gloxinias, lobelia, streptocarpus, salvias, verbenas, etc., and at the end of the month, antirrhinums. Shade, protect from damp and insects, and remove cover when germination has taken place. Sow sweet peas in boxes. Warm temperature needed for all these.

SWEET PEAS.—Pot up those sown in the autumn, and stake with small twigs.

## FRUITS AND VEGETABLES UNDER GLASS.

FIGS.—Start now. Well water the borders. Close the house for ten to fourteen days. Keep temperature low at first, gradually raise it to 45° at night, and then ventilate a little. Syringe twice daily and damp down the walks to induce the buds to break.

MELONS.—Sow singly in 3in. pots after soaking the seeds for a few hours. Plunge in a brisk propagator with a bottom heat of 80°.

PEACHES.—Start now. Treat as advised for figs. Temperature must not be too high at first, otherwise the growths come away before the flowers, and when the flowers open they drop off. As the flower buds show signs of bursting discontinue syringing, and raise the temperature to 50-55° at night. Ventilate cautiously.

STRAWBERRIES. FORCED.—Water carefully those coming into flower, and pollinate artificially. Temperature 45° at night. Give air whenever possible, unless the temperature outside is below 32°. Leave eight to ten flowers on each plant, place in a light airy position. Feed continually with a quick-acting manure until fruit begins to colour. Bring in for forcing from the plunge another batch to form a succession.

VINES.—Start early vines. Give a good watering and close the house for the first week. Tie down horizontally rods of young vines in order that the lower buds may start into growth at the same time as the top. Syringe and damp down. Second week, raise temperature to 55° at night and ventilate a little. Prune hard back young vines struck last year. Insert vine eyes in 3in. pots in a compost of 3 parts fibrous loam, 1 part sifted lime rubble, 1 part leaf-soil. Put sand at the base of the eye. Plunge in a propagating case with bottom heat.

CARROTS.—Sow shorthorn varieties on a hot bed.

CUCUMBERS.—Sow in 6in. pots in a rich friable compost of loam, leaf-soil and old mushroom manure. Put eight to twelve seeds in each pot and cover with ½in. of soil. Place in a propagating case and remove to a cooler position when growing well. Transplant when the first pair of leaves is formed.

DWARF BEANS.—Sow in pots in a temperature of 60-70° at night. Half fill the pots with moderately rich compost. Top-dress when seedlings 3ins. high. Pinch the growing point of those sown last month and keep the atmosphere warm and humid.

MUSTARD AND CRESS.—Sow each week in boxes. Scatter seed, but do not cover. Place a piece of slate over boxes until seed germinates.

ONIONS AND LEEKS.—Sow early this month in boxes in a temperature of 65-70° at night. Cover with glass and shade with brown paper.

PEAS.—Sow in boxes every fourteen days, using different varieties each time in order to form a succession. Soak the boxes and place in a heated pit or cool house. Guard against mice. Smother seed with red lead and paraffin before sowing. When germinated remove to cooler quarters.

POTATOES.—Plant in frames on a hot-bed for early supplies.

SEAKALE, RHUBARB AND ASPARAGUS.—Bring in for forcing.

SUMMER CABBAGE, CAULIFLOWER AND LETTUCE.—Sow in boxes, add lime to the compost and germinate in a moderate temperature.

TOMATOES.—Sow main-crop in mid-January, in a temperature of 60° at night. Use a sandy compost with a little lime added, and have the boxes well drained. Cover and shade until germinated. Pot up early-sown batches.



# SIMPLE GARDENING

## CLEANING AND TYING PEACH AND NECTARINE SHOOTS.

TREES grown under glass are more liable to attack by insect pests than those grown in the open air. Although the former are, really, under control they are not, in many instances, kept so. During the summer months constant syringing is necessary to keep in check the green and black aphides—mostly the latter—that infest the leaves, also red spider and thrips. But perhaps the worst enemy is the brown scale and summer syringing will not

have any effect on them as they thrive where clean water is applied. The present is a good time for cleaning the branches where scale is found on them. Insecticides, as advertised, may be used or a solution of soft soap and sulphur. Three ounces of the former and two ounces of the latter boiled gently for thirty minutes in one quart of rain water, will answer our purpose. Use this liquid at the rate of half a pint to a quart of clear water on the old wood only. It must not be smeared on the young buds; usually, the current year's shoots are free from scale. Apply with

a stiff brush and finish the work by thoroughly syringing the branches with clear water. Remove the surface soil from the borders and lime-wash any walls. The fruits are borne on the current years shoots, these should be tied in 4ins. apart near the bottom of each tree, leaving the shoots farther apart near the centre as the centre always fills up during the growing stages. Use soft raffia or other tying material.

## PLANTING ROSES UNDER GLASS.

Roses are more generally grown under glass now than even ten years ago, because, so grown they are better understood; there are more suitable varieties—those having long, stiff flower stems—and they are more popular, even. In a single small greenhouse one rose tree may be grown, planted out or in a large pot. It is not advisable to include the variety Nephitis in a small collection; it is only suitable for a big structure where there is ample space. Molly Sharman Crawford and Mrs. Stevens, both white-flowered, are better. Richmond is good, Liberty, too; and Hadley, a deep crimson with delightful fragrance should be included. Madame A. Chatenay must have a place; in fact, if one variety only can be accommodated, this should be the one. Hugh Dickson, although a hybrid perpetual, does well under glass; Ophelia, Climbing Richmond, Mme. Butterfly, Mrs. J. Laing, Climbing Lady Hillingdon, Souvenir d'un Ami and Maréchal Niel are some of the best. The positions for the plants should be selected now; plenty of light is essential to success and strong, not weakly, specimens to begin with. A rich loam, inclined to be sticky rather than crumbly, is the best. A naturally light loam should be improved by the addition of stiff soil, and, in every case, add some good, well rotted manure—manure rotted under cover, not exposed to rains. Bury the manure quite 6ins. below the surface. As the rooting space is, naturally, limited under glass, it is essential that particular attention be paid to providing good beds and drainage. Do not be tempted to overcrowd the plants.

GEORGE GARNER.

## A USEFUL SOWING TABLE.

This simple table shows at a glance how many of the principal vegetable seeds a cultivator should order, at once, for stocking a small suburban garden.

Kind.	Quantity of Seeds.	Sown in Drills or Broadcast.	Approximate Space Sown.
Artichokes (Globe) ..	1oz. ..	In drills ..	100ft.
„ (Jerusalem) ..	1 peck ..	Tubers in drills..	50ft.
Asparagus ..	1oz. ..	In drills ..	75ft.
Beans (Broad) ..	1 quart ..	„ „ ..	80ft.
„ (Dwarf) ..	1 pint ..	„ „ ..	50ft.
„ (Runner) ..	1 quart ..	„ „ ..	150ft.
Beetroot ..	1oz. ..	„ „ ..	40ft.
Broccoli ..	½oz. ..	Broadcast ..	1,000 plants.
Brussels Sprouts ..	½oz. ..	„ ..	1,000 „
Cabbages ..	½oz. ..	„ ..	1,000 „
Carrots ..	1oz. ..	In drills ..	100ft.
Cauliflowers ..	—	—	1,000 plants.
Celery ..	½oz. ..	In boxes ..	1,000 „
Cress ..	1 pint ..	Broadcast ..	Thickly sown.
Cucumbers ..	1 packet ..	11 pots ..	Six plants.
Endive ..	1 packet ..	11 boxes ..	1,000 plants.
Kale ..	½oz. ..	Broadcast ..	1,000 „
Leeks ..	1oz. ..	In boxes ..	1,000 „
Lettuces ..	See Endive.		
Mustard ..	See Cress.		
Onions ..	1oz. ..	In drills ..	200ft.
„ ..	½oz. ..	In boxes ..	500 plants
Parsnips ..	1oz. ..	In drills ..	100ft.
Peas (Early) ..	1 pint ..	„ „ ..	50ft.
„ (Maincrop) ..	1 pint ..	„ „ ..	60ft.
Potatoes (Early) ..	150 sets ..	„ „ ..	One square rod.
„ (Maincrop) ..	100 „ ..	„ „ ..	„ „ „
Salsafy ..	1oz. ..	„ „ ..	100ft.
Savoy ..	See Cabbages.		
Shallots ..	300 bulbs ..	In rows ..	One square rod.
Spinach ..	1oz. ..	In drills ..	100ft.
Turnips ..	1oz. ..	„ „ ..	200ft.
Vegetable Marrows ..	See Cucumbers.		

## SERVICE FOR READERS

Though so many subjects are dealt with in each issue of THE GARDEN, it must constantly happen that readers seek information which is not immediately available. In such circumstances they should make use of our new Service Department. Through its medium each reader's own particular enquiry can be dealt with. No matter what the question is, whether advice is sought as to—

RESTOCKING A GARDEN, COLOUR SCHEMES FOR GARDENS, THE BEST PLANTS FOR CERTAIN SITUATIONS, WHERE TO OBTAIN NEW AND RARE PLANTS, INSECT PESTS, NAMING OF PLANTS, AND THE HUNDRED AND ONE OTHER DETAILS RELATING TO THE GARDEN—

there is always information available from a staff of expert contributors and consultants; and there is no charge for this. It is one of the additional means of Service which THE GARDEN is glad to render to its readers.

Also, there is the further convenience which the Service Department affords of supplying readers with data about anything that is advertised in the pages of the paper. Thus, on receipt of an enquiry, particulars will be sent of, say, half a dozen things about which the reader seeks information. The only stipulation is that a stamped addressed envelope shall be sent with the enquiry.

All communications should be addressed to the Service Department, THE GARDEN, 20, Tavistock Street, Covent Garden, London, W.C.2.

PLEASE REMEMBER TO MENTION "THE GARDEN" WHEN ANSWERING ADVERTISEMENTS.



## MORISIA HYPOGÆA

**W**HAT is, I am pretty confident, one of the most appreciated of alpine plants when in bloom is that charming plant, *Morisia hypogæa*. I am calling it an alpine, although, like a host of others, it does not come from high altitudes, but from the lower grounds of Sardinia. But it is eminently suited for the conditions of our rock gardens and, in common with other dwarf plants from low altitudes, may be classed as an "alpine." Its habit of growth, low and spreading (but not rapidly), makes it really an ideal plant for the rock garden, while the beauty of its prettily formed glossy leaves and the charms of its bright yellow flowers combine to give it a fascinating appearance in our eyes. Unfortunately, it has one trait which is a source of great disappointment to many. This is that it has occasionally a trick of dying off after having apparently become well established and when it gives one the prospect of retaining it for many years. I have experienced this personally and have learned from a good many others that this is their trouble also. The cause is mysterious, but, happily, the plant is propagated without much difficulty, and one can easily have a few plants in store in various stages of development, ready to replace any which may be lost. I cannot hazard an opinion regarding the cause of this unwelcome demise. But the *morisia* is very easily propagated by root cuttings, and also by division of large plants when carefully done. Seeds are also produced, but as these soon become buried in the soil they are often uncollected at the proper time. I have never found any young plants from seeds growing beside old ones, but in frames filled with sandy soil I have observed what appeared to be young plants from underground runners. As these were not my own plants I could not ascertain if they were from runners or seeds. But root cuttings are easily raised by cutting the roots into lengths of about an inch in autumn or very early spring and inserting them in pots with the thickest portion just at the surface of very sandy soil. In spring, growths will appear on the root cuttings and they can be potted off separately in the course of the summer. The cuttings should be put in a cool house or frame.

Respecting the cultivation of the plants in the rock garden, I have tried various composts and treatments, but what appears to suit *M. hypogæa* best is a very sandy soil with some leaf-mould and grit mixed with it. A well drained spot should be chosen on a sunny part of the rock garden. Although not essential, I have found this *Morisia* flourish best if it has frequent applications of pure water in dry weather in summer, applying this in the evening after the sun is off the plants. It appears strange to us that *M. hypogæa* was lost to cultivation in this country for a number of years after its first introduction, but this habit of dying off may account for this. Even with this failing, *M. hypogæa* is one of the most charming of the many beauties we can cultivate in our rock gardens.

S. ARNOTT.

## ANSWER TO CORRESPONDENT

**Renovating a Mossy Tennis Lawn** (D. R.).—This season has been very favourable for the growth of moss on weakly lawns. Those lawns which have been highly cultivated resist its intrusion. When the moss has gained a foothold, immediate steps should be taken to clear it away. Raking the turf is frequently tried, but it is ineffective. Its presence can generally be attributed to impoverishment or imperfect drainage, and frequently to both. It is necessary, therefore, to see that the drainage is right and the drainage pipes working well. When this is done, mow

the lawn very close and apply one of the advertised moss eradicators according to directions. It generally takes two weeks for the preparation to do its work. At the end of that period most of the moss will be dead and can be easily raked from the lawn. At this stage apply chemical manure prepared to supply the deficiency which exists in the soil, so that it may be more favourable for grass growth and less suitable for growing moss. Immediately it has been applied, sow whatever grass seed may be necessary to thicken the turf. Lightly rake both of these together into the surface and afterwards mow the lawn without the collecting box being attached to the lawn mower. Continue to mow in this manner when necessary, for a time without the collecting box being attached to the machine. Avoid rolling until near the time for play, and then do it thoroughly until a fast, true playing surface is obtained.

## CATALOGUES RECEIVED.

Messrs. Carter and Co., Raynes Park, London, S.W.20. Annual catalogue for 1925.

"Garden and Lawn."—Messrs. Carter and Co. have long been widely known throughout the horticultural world through their characteristic trade mark, of "Tested Seeds." Year by year, the firm has kept up with the gradually increasing knowledge in the raising of all garden produce. They have always endeavoured assiduously to maintain that high standard of excellence which characterised the energies of the firm in its embryo stages, and judging from their record of 1924, they have fully realised their aim. Their catalogue, as usual, is a comprehensive guide running to 116 pages and profusely illustrated by numerous half tone reproductions. There are a few coloured illustrations which, although not excellent, are of a high standard. A mine of useful information is contained in its pages, which will be found of extreme value and assistance to professional and amateur gardeners alike. Whether one seeks enlightenment on the raising of up-to-date vegetables in all their varieties, the treatment of lawns, one of the most important branches of the firm's duties, or the cultivation of flowers, the material is contained therein, set out simply, clearly and concisely. The catalogue indicates that one may look forward with eagerness and hope as to what the year 1925 has in store for the horticulturist.

Mrs. Grive, Whin's Cottage, Chalfont St. Peters, Bucks.—Pamphlets on Medicinal Herbs.

Messrs. Austin and McAslan, 89-95, Mitchell Street, Glasgow.—Alpines and Herbaceous Plants, also Coniferæ, Ornamental Trees and Shrubs, and Fruit Trees. Both handy guides for all gardeners in Scotland.

G. R. Downer, Drayton Manor Nurseries, Chichester.—Herbaceous and Alpine Plants—novelties for 1925.

Messrs. Clarke's, Royal Hampton Nurseries, Hampton, Middlesex.—Useful lists of roses, fruit trees, climbers and other plants, with a few hints given on cultivation.

Messrs. Harrison and Sons, St. James Street, Leicester.—Novelties and Specialities for 1925.

## PUBLICATION RECEIVED.

"Descriptive Labels for Botanic Gardens," by Humphrey Gilbert Carter, Director of Cambridge Botanic Garden. (Published by Cambridge University Press, 1924, price 1s. 6d. net.)

**Royal Horticultural Society.** The R.H.S. Medals.—Some misunderstanding seems to exist among exhibitors at Vincent

Square as to the various medals that are awarded by the Royal Horticultural Society. The misunderstanding may arise from the fact that about two years ago the Council carefully considered the whole question of the medals and decided to allot them each to a particular purpose and not to award the various degrees of all the different medals indiscriminately. Three years ago it was possible for the various committees to recommend the award of one or other of no fewer than ten different medals to any exhibit in the hall. At the top came the gold medal and then nine others in the following order: Silver-gilt Flora, silver-gilt Grenfell, silver-gilt Banksian, silver Flora, silver Grenfell, silver Banksian, bronze Flora, bronze Grenfell, bronze Banksian. This multiplicity of medals had two results; the first was that members of the public were entirely mystified and had little or no conception as to the relative value of any of them; and, secondly, the committees got into the way of ignoring the existence of bronze medals altogether. The Council decided that for floral exhibits in the hall at Vincent Square at the ordinary fortnightly shows, it was sufficient to have four degrees, and these were to be the gold medal and the Banksian, either silver-gilt, silver or bronze. The Flora medal was reserved for Chelsea and Holland Park, where exhibits are usually on a more important scale than at Vincent Square. The Grenfell medal was kept for exhibits of botanical drawings and paintings. In the same way the Hogg and Knightian medals, which had been awarded to fruit or vegetables, were separated, and for exhibits of fruits at Vincent Square there are now four degrees, the gold medal and the Hogg medal in silver-gilt, silver or bronze, and, for vegetables, the gold medal and the Knightian medal, in the same way. Obviously, in the period of transition from the old system to the new, some exhibitors may have felt that their award was inadequate or, rather, less than they expected; but, after all, the value of an award is not the intrinsic value of the medal, but the distinction in the eye of the public which comes by the awarding of the medal to its recipient. Any visitor to Vincent Square will now see that an exhibit may receive either a bronze, silver, silver-gilt or gold medal and will know at once the value that is attached to it by the committees and council. The Flora medal was reserved by the Council for award at Chelsea or Holland Park for the following reasons: Exhibits at Chelsea are much more numerous and vary much more in importance than those at Vincent Square, and, consequently, if the same medals were awarded to exhibits in order of merit, it would obviously often happen that an exhibitor would receive a medal at Chelsea for a more important group than one for which he would obtain the same medal at Vincent Square, and would, not unnaturally, feel himself aggrieved.—W. R. DYKES, *Secretary, Royal Horticultural Society.*

## East Anglian Horticultural Club.—

The annual meeting of this flourishing debating and educational club was held at the Boar's Head Hotel, Norwich, on December 10th. The annual report states that the membership now stands at 226. The finances are in a satisfactory condition, there being a credit balance of £95 3s. The election of officers resulted in Mr. F. J. Endersley, The Gardens, Keswick Hall, Norwich, becoming president; Mr. S. High, The Gardens, Framingham Manor, Norwich, acting vice-president; Mr. John Clayton (Messrs. Daniels Brothers, Limited, Norwich) treasurer; Messrs. Herbert Perry and A. A. Ramsbottom, auditors; and Mr. G. R. Todd, 12, Royal Arcade, Norwich, secretary. A lengthy list of special prizes for special exhibits during the forthcoming year was announced, and also a syllabus of lectures, essays, etc., for each monthly meeting during 1925.



# THE GARDEN.

**WATERER'S GOLD MEDAL RHODODENDRONS,** Azaleas and Roses, rare Hardy Shrubs, Fruit Trees, etc., Alpine and Perennial Plants, Vegetable and Flower Seeds, Scotch-grown Seed Potatoes. Catalogue free.—**JOHN WATERER, SONS & CRISP, LIMITED,** Twyford, Berks; Bagshot, Surrey; and London.

**JAMES GRAY, LTD.,** Builders of Conservatories, Greenhouses, etc., and Heating Engineers, Danvers Road, Chelsea, London, S.W.3. Wire: Gray, Kensington 90. Telephone: Kensington 90 and 91.

**MAKLEY'S PATENTED HOP MANURE.** The original and only substitute for Stable Manure. See advertisement on back cover.

**M. DUNCAN TUCKER & SONS, LTD.,** 100, Victoria Road, South Tottenham, N.15.—Conservatories, Flower Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**ROBERTS' BATHS, GARDEN VASES, SUN-TRAPS, NESTING BOXES.** Catalogue (No. 4) free.—**ROBERTS, 60, Buckingham Palace Road, S.W.**

**RIVERS' FRUIT TREES, ROSES, VINES,** etc. Oranges and Orchard House Trees are of first-class quality. A large and select stock is always on view. Inspection and catalogue post free on application.—**THOS. RIVERS & SONS, LIMITED,** The Nurseries, Sawbridgeworth, Herts.

**EVERY HORTICULTURIST SHOULD READ "THE HORTICULTURAL EXHIBITOR."** A. J. Macself's book. It teems with valuable information and sound advice for all who grow for show. 3/6 net of all Booksellers. For prospectus "G" of the "HOME GARDEN BOOKS" write to the Publishers: **THORNTON BUTTERWORTH, LTD.,** 1, Bedford Street, London, W.C.2.

**ALPINES FROM THE FINEST COLLECTION** in the West of England, 150,000 pot-grown plants, including many rarities. Descriptive Catalogue free. Hardy plants a speciality.—**BOWELL AND SKARRATT,** The Alpine Nurseries, Cheltenham.

**DRANGEA MAD!** A delightful sensation caused by growing the lovely new varieties; send for H. J. JONES' Catalogue of Gold Medal Hydrangeas, Chrysanthemums, Monticlos, Michaelmas Daisies, Hardy Phlox, etc., free on application. Also H. J. JONES' Chrysanthemum Guide, 17th edition, 1/3.—**Ryecroft Nurseries, Lewisham.**

**SHRUBS** are becoming more and more popular in gardening. "Shrubs for Amateurs," Mr. W. J. Jones' new book, is the best on the subject at a reasonable price, 5/- net. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**SEED POTATOES,** May Queen, etc. of York, Eclipse, Midlothian Early, Epicure, Di Vernon, etc., Dargill Early, Great Scot, Arran Comrade, Ally, Abundant, Immune Ashleaf, Arran Chief, Golden Wonder, King of the K., Majestic, Rhoderick Dhu, Bishop, etc. Prices 1s. 6d. cwt. and ton on application. List of Vegetables and Potatoes free.—**TILLIE, WHITE & CO.,** 12, Melbourne Place, Edinburgh. Established 1837.

**WELLS' CATALOGUE OF CHRYSANTHEMUMS** now ready, and will be sent post free on application.—**WELLS & CO.,** Merstham, Surrey.

**INSECT PESTS AND PARASITES.**—A useful book on garden troubles by **HORACE J. WRIGHT** is to be sent from the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, W.C.2; 11d. post free.

**CHRYSANTHEMUMS. ROOTED CUTTINGS.** Japs., 5/- doz.; decorative, single and early-flowering, 5/- 2 doz. Cash with order. Post free. Ready for delivery onwards. List on application.—**SHEPARD'S,** Shaw's Nursery, Hollywood, Birmingham.

**BARR'S FLOWER & VEGETABLE SEEDS** of finest Selected Strains and Tested Growth. At the R.H.S. Wisley Trials our Strains of Vegetable Seeds have received exceptional recognition for high quality. Gold Medal awarded for Annuals at the Great International Flower Show, Antwerp, 1920. Descriptive Catalogue free.—**BARR & SONS, 11, 12 & 13, King Street, Covent Garden, London, W.C.2.**

**AURICULAS** for border or cold house and frame. Douglas Famous Gold Medal Strain. Sow now. 2/6 and 5/- per packet.—**J. DOUGLAS,** Gt. Bookham.

**IRON AND WIRE FENCING** for Gardens, Tree Guards, Gates, Arches, Espaliers, Rose Stakes and Ornamental Garden Iron and Wirework of every description. Send for Illustrated Catalogue. Also Kennel Railing and Poultry Fencing. Ask for separate lists.—**BOULTON & PAUL, LIMITED,** Norwich.

**TOMATO CULTIVATION: UNDER GLASS AND OUTDOORS.** By R. V. GIFFARD WOOLLEY. A practical booklet, 9d. net, by post 11d. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**ALL PROFESSIONAL GARDENERS** should become Members of the British Gardeners' Association. Full particulars (stamp).—**JOHN WEATHERS, 1, Park View, Isleworth.**

**SEWAGE DISPOSAL FOR COUNTRY HOUSES.**—No emptying of cesspools; a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—**WILLIAM BEATTIE, 8, Lower Grosvenor Place, Westminster.**

**LAXTON'S NEW SEED CATALOGUE,** containing Novelties for 1925. New Pea "Bedford Champion" and "Laxton's Progress," post free on application. Fruit Tree Catalogue and Cultural Hints can also be sent, post free, on request.—**LAXTON BROTHERS,** Nurserymen, Bedford.

**YORK STONE PAVINGS,** crazy or rectangular, rustic copings, steps, roughly squared or random shaped, flat bedded wallstones, garden edging, rockery, etc.—**SAMUEL JOHNSON AND SON,** Quarry Owners, Mirfield, Yorkshire

**IPSWICH RARE SEEDS.** Catalogue describing nearly 3,000 kinds now ready. Free on application to **THOMPSON AND MORGAN,** London Road, Ipswich.

**CHOICE NEW CHRYSANTHEMUMS.**—Our Catalogue of nearly 900 varieties, including Grand Novelties for 1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready. Post free on application.—**J. W. COLE AND SON,** Chrysanthemum Specialists, Peterborough.

**POTATOES: HOW TO GET THE BEST CROPS.** A booklet that is full of useful information. By **EDWIN BECKETT, V.M.H.,** 9d. net, by post 11d. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**MANURES.**—The most complete little book on the subject is "The Manual of Manures," by H. VENDELMANS. 4/5; by post, 4/9. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**THE CULTURE OF CHRYSANTHEMUMS.** By W. WELLS, 2/6 net; cloth, 3/6 net; by post 6d. extra. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**CANADIAN AND AMERICAN GLADIOLI.**—The best of the standard varieties and novelties.—**J. W. CROW,** Simcoe, Ontario, Canada.

**SUTTON'S VEGETABLE SEEDS.**

**ONION, SUTTON'S SELECTED AILSA CRAIG.** Per packet, 2/6 and 3/6. **SHREWSBURY FLORAL FETE, 1924.** First Prize in the Open Class for Spring-Sown Onions. First Prize in the Open Class for Autumn-sown Onions. **SUTTON AND SONS, THE KING'S SEEDSMEN, READING.**

**DOBBIE'S 1925 CATALOGUE AND GUIDE,** 136 pages, 194 illustrations. Free to all readers. Please mention THE GARDEN when writing.—**DOBBIE & CO., LTD.,** Edinburgh.

**BATH'S SELECT SEEDS AND PLANTS.**—New Illustrated Catalogue of choice Vegetable and Flower Seeds and Plants is now ready, and will be sent post free on applications.—(Dept. E), **R. H. BATH, LTD.,** Floral Farms, Wisbech.

**CHEAP GOVERNMENT WIRE!!!** Great for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760 yards). Postcard to-day for free samples and list of 300 bargains.—**GREEN'S GOVERNMENT STORES, 69, Albert Street, Lytham.**

**ALPINES AND DWARF CONIFERS** for Rock Gardens. 50,000 pot-grown Alpines in stock; over 300 varieties. 2 dozen collection, 8 kinds, 15/- carriage paid. Lists free.—**HODSONS,** Castlegate, Nottingham.

**BARNARDS, LTD., NORWICH,** for Garden Requisites of all kinds.

**FIDLER'S NEW ILLUSTRATED GARDEN SEED GUIDE AND CATALOGUE FOR 1925 IS NOW READY,** and a copy will be sent post free to any address on receipt of a post card.—Write at once to **FIDLER & SONS,** Royal Berkshire Seed Stores, Reading.

**GARDEN DESIGN** is best dealt with in "Planning and Planting of Little Gardens," by G. DILLISTONE, 6/-; by post, 6/6. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**THE GARDEN DOCTOR: Plants in Health and Disease,** by F. J. CHITTENDEN, V.M.H., freely illustrated, 7/6 net, by post 8/-. A prospectus of this practical book will be sent post free on application to The Manager, "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**SWEET PEAS AND HOW TO EXCEL WITH THEM.** By **HORACE WRIGHT,** 9d. net, by post 11d. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**STORING VEGETABLES AND FRUITS,** with chapters on "Drying in the Oven and by the Kitchen Fire." By **HERBERT COWLEY,** 9d. net, by post 11d.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**LABELS TO LAST—AT LAST!**—You write by any nail point, on prepared (Patented) Metal, yet it cannot fade. Severely tested for years on inventor's Nurseries. The R.H.S., after long trial, award H.C. List of shapes free. Samples 2d.—**WEBSTERS PATENTS CO.,** Witheridge, Devon.

**IMPROVE YOUR GARDEN** by the use of solid Oak Trellis Screens; they are ideal for growing creepers of all kinds and for securing privacy, at the same time adding an artistic feature that will last a lifetime (being pickled in preservative). No trouble to erect (being made in sections). Send for lists and get an estimate from **W. T. REVITT,** Railway Works, Olney.

**GREENHOUSE PAINTING AND GLAZING.**—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt, kegs extra; 7lb. tins, 4/- post free; 14lb. tins, 5/6 each, carriage extra, tins free.—Full particulars from **W. CARSON & SONS,** Grove Works, Battersea, S.W.11.



# CARTERS TESTED SEEDS

*BREAK all RECORDS with*

## GIANT STRIDE PEA

ORDER

NOW

**The Largest  
PODDED**

**DWARF PEA** IN THE  
WORLD.

HEIGHT 2 FEET.

**ILLUSTRATED CATALOGUE**

POST FREE ON APPLICATION.

**James Carter & Co.** SEEDSMEN TO  
H.M. THE KING.  
**RAYNES PARK, LONDON, S.W., 20.**

Please mention THE GARDEN when writing.

*Notes from Maidstone.*

### A RARE CHERRY.

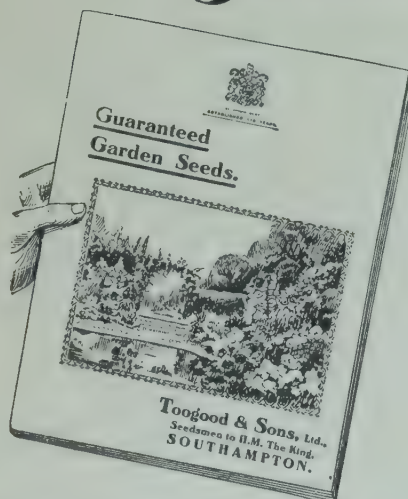
We can now offer a few plants of the rare *Prunus pseudo-cerasus* (Lindley) at 21/- each, two years old, or one year at 15/-. This fruits very early in a cold house and is quite hardy outdoors, but flowers too early to produce fruit. The leaves are very handsome and most uncherrylike. We believe this is the first time this has been offered for sale in England.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Maidstone.

Established 1796.

Please mention THE GARDEN when writing.

# Toogood's Seeds



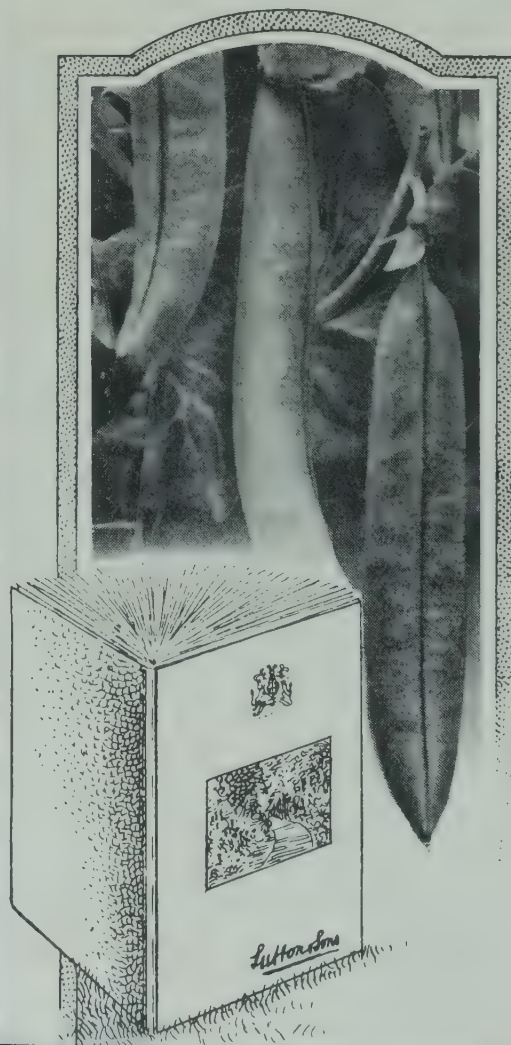
The same labour, the same tools, the same manures—WITH OUR GUARANTEED GARDEN SEEDS ADDED—will yield for you an infinitely better Garden than ever before. Send a postcard to-day for our 160-page, beautifully illustrated

**FREE GUIDE TO  
GUARANTEED  
GARDEN SEEDS.**

Every packet ordered thence must grow for you and please you or you will get it replaced freely: and the seeds cost less to buy. Address us personally:

**TOOGOOD & SONS, Ltd.,**  
Seedsmen to H.M. the King, **SOUTHAMPTON.**

Please mention THE GARDEN when writing.



# Sutton's Seeds

## Sutton's Garden Peas

We would direct special attention to our well-known pea, *The V.C.*, the largest-podded pea in cultivation, and to *Sutton's Phenomenon*, the most remarkable pea in the Dwarf section; a prodigious cropper with large pods tightly filled with from nine to twelve peas.

**Delicious Peas from May to November.** The duration of the pea crop has in recent years been greatly extended, and by growing suitable garden varieties, it is possible to obtain supplies from the open ground from May to November.

**SUTTON'S SPECIAL COLLECTIONS**  
SUTTON'S PIONEER SUTTON'S BEST OF ALL  
SUTTON'S EARLY GIANT SUTTON'S PEERLESS  
SUTTON'S SELECTED DUKE OF ALBANY  
SUTTON'S PERPETUAL  
SUTTON'S PRIZEWINNER SUTTON'S LATEST OF ALL  
or other very choice varieties at our option.  
2 quarts of each, 58/- 1 quart of each, 30/-  
1 pint of each, 18/-

**SUTTON & SONS,**  
The King's  
Seedsmen, **READING.**

Please mention THE GARDEN when writing.





VOL. LXXXIX.—No. 2774.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. Offices for Advertisements: 6—11, SOUTHAMPTON STREET, STRAND, W.C.2.  
Entered as Second-class Matter at the New York, N.Y., Post Office.

JANUARY 17, 1925

## THE LIMITATIONS OF PLANTS

**D**R. PRAEGER contributed to the last issue of *THE GARDEN* a frank article on "Plants I Have Killed."

It is only natural that botanists, who at the same time are experienced cultivators—by no means such a common combination as might be expected—in the course of their experience with plants must have a certain percentage of casualties; in fact, the surprising thing, considering the miffiness of some plants, is that the percentage of casualties is so small. If, as I say, experienced cultivators have casualties in their gardens, it is obvious that the percentage of deaths in ordinary gardens increases in an inverse ratio according to the lack of skill, or of insight, of the cultivator, if the proverbial luck of the beginner is not taken into consideration.

From the point of view of this article, plants may be divided into two broad groups, those which are thoroughly established in cultivation and those which are not. In the first group casualties are caused through human agency; that is, that experience has taught us what the particular plant requires for its successful growth and ultimate arrival at maturity. The plant is intimately understood by numbers of individuals; its necessities and economics are described in books and in the horticultural press; therefore casualties above the average are largely owing to the human factor in its cultivation. It may die owing to wrong treatment in a young state, or to being planted in a wrong medium or under unsuitable climatic conditions. It may succumb owing to a hundred and one different causes, each of which is due to the lack of experience of the grower. All these causes are avoidable because the plant's successful cultivation is known and recognised by a large body of gardeners.

This experience is only gained after a number of years. In many cases it is only known from the combined efforts and experiments of generations of gardeners. Now take the case of the second group. Certain plants, even after years of trial in various parts of the country, have not proved themselves amenable to cultivation in gardens. In many cases the ordinary terms of success or failure, such as hardiness, susceptibility to insect pests, drought-resisting and so on, go by the board. There may be no conceivable reason why the plant should not grow, and yet it won't; it is stubborn, for its interior balance is upset. It is analogous to placing a shepherd in a city office or *vice versa*. There is no doubt that some plants are placid and adaptable, while others are so highly strung that the slightest change of environment and mode of life is fatal.

As this change of environment and mode of life is so important to a plant, it is as well to find out all there is to be known, which may not be much, about an uncommon plant. Because you see it flourishing in a friend's garden is no

insurance that it will succeed in yours. Probably it will; possibly it may not. Here are a few of the main points to look out for:

1. Soil conditions. Are they the same as that in which the plant flourishes? If not, can you approximate them by additions?
2. Light and shade. Do you know how much sunlight the plant requires?
3. Protection. Was it sheltered from the wind? If so, which wind?
4. Water and moisture. This follows on point one. Does your soil retain too much or too little moisture? Is winter drought or winter wet a necessity?
5. Space. Do you know its mature size, and are you allowing for this?
6. Associations. Is it a plant which likes companionship? Does it like to grow in groups or is it solitary?
7. Feeding. Does it require feeding, and if so, what food?
8. Hardiness. Is it hardy or not? This word "hardiness" is constantly misused, for hardiness is a question of degree. Many casualties are put down to a plant not being hardy when the cause of death may be errors in any one of the above seven points. For instance, many plants are useless around London, because they are cut with the spring frosts and yet farther north they may flourish exceedingly, because they start into growth later. These plants are called soft, which is technically untrue. Their balance is upset.

I should also point out that there is a converse to this argument. Supposing a plant will grow in A condition of soil with B amount of moisture and C hours of sunlight, and so on. That may constitute a happy mean of its limitations, and so latitude may be allowed on either side. On the other hand it may prove to be the extreme at one end of the scale or the other, and so, though you can add more hours of sunlight, you cannot grow it in deeper shade. Yet a bird in the hand is worth two in the bush, and if you know, or can find out under what definite conditions a plant will grow, try to equal them and so keep down casualties, which are unavoidable in experiments.

Remember that every plant has a statute of limitations and if you go beyond it, the balance is upset and the plant dies. Some gardeners have second sight about a plant's requirements; they are the lucky ones. Others, who like experimenting with unknown plants, see their casualty lists creeping up.

E. H. M. C.



# THE CULT OF THE POLYANTHUS

THERE ARE FEW SPRING FLOWERS WHICH PROVIDE SUCH AN EXCELLENT DISPLAY AND CAN BE PUT TO SUCH AN INFINITE VARIETY OF USES AS THESE MANY FLOWERED PRIMROSES.

IT is doubtful if there is a more generally useful long-blooming spring flower than the old-fashioned polyanthus, and on the score of beauty too it can certainly claim a very high place. Good as the old plant of our childhood's days appeared, it must be admitted that the modern strains are infinitely superior in every way. Cleanness of colour, size of flower, strength of the trusses and the manner in which they are held high above the rosette of leaves—in all these points the improved strains score enormously.

That, of course, is all on the side of garden display and does not apply to some of the interesting old-fashioned forms that are still as good as ever, from the point of view of those who are keen on unusual or old-time flowers. It would be a pity, for instance, to miss Jack-in-the-green, a crimson form surrounded by a foliaceous calyx, known botanically as *Primula officinalis macrocalyx*. Are there not, too, the queer hose-in-hose forms, in white, scarlet, crimson and gold, and deep yellow?

common primrose and sharing its love for partial shade, the polyanthus is splendid for massing, either in the orchard or the wild garden, and an ideal combination can be planned by long irregular drifts of both primrose and polyanthus, used in such a position. First, even as early as February in a mild season, one gets masses of the lovely primrose, and then, just as these are beginning to fail and fade, the polyanthus—hitherto a trifle spotty in its effect—blazes into full glory, thus prolonging the display from February to mid-April or even later.

Where used for natural plantings, the best effect is obtained from the lighter colours: the reds and crimsons have a partially foreign look that is out of consonance with their surroundings. These semi-woodland plantings are often remarkable for their lasting powers and it is no uncommon sight during the April days to see those plants that are set out in the formal beds badly flopped; while a short distance away, 'neath the leafy trees, the stout stems and succulent leaves are sturdily upright and gorgeously beautiful in the light and shadow of the dancing sunbeams that pierce their way through the—as yet—thin overhead covering.

This brings up a cultural point of prime importance: the need for shaded summer quarters in which to grow the plants. If left in the hot, dry, sunny beds, the polyanthus becomes herbaceous instead of evergreen, and all the foliage disappears under the heat of summer, to reappear with the advent of the autumn rains. This, naturally, is extremely prejudicial to first-class flowering, and is completely avoided by planting the roots that are divided, or the seedlings that have been raised, in a border of rich soil but well in the shade.

Personally, we are all in favour of seed as the method of propagation, for there cannot be a question that, when seedling and divided plants are flowered side by side, everything is in

favour of the former. The contention sometimes advanced that division gives larger plants is incorrect; that is to say, if the seedlings are given proper treatment from the outset. This, combined with early sowing, will give you plants that are nearly as large as the divisions themselves by mid-June, and in the following three months the seedlings gain all the way.

Early sowing may be taken to mean one of two dates—either under glass in January or directly the seed is ripe in July in the open ground. Whichever period is favoured, sowing of the thinnest order should be practised, so that each little plant has room to develop to its utmost capacity, without hindrance from its neighbour. Sowings made in July will not flower until the following spring twelve-months, those made under glass in January requiring about fifteen months.

In the case of indoor sowings, the plants should be transferred to cold frames as speedily as possible for the sake of future sturdiness, and, in either case, pricking out should be done when the fourth or fifth leaf has been formed. A deeply worked shaded border that has been well manured two or three months previously is ideal for pricking out, and each seedling should be 8ins. to 10ins. from its neighbour. This may sound



THE POLYANTHUS ENJOYS THE SHADE OF THE WOODLAND.

These have smaller flowers, but are very curious, having a flower within a flower and both similarly coloured. Nor must we forget the gold and silver laced forms, which—though again small—are in the richest possible colouring. In some cases the flower is crimson, in others so deep a brown as to appear practically black; while in every case each bloom is edged by a narrow but very distinct gold or silver line.

Of modern bedding strains, those who appreciate light colours—and it must be recognised that these carry well—it would be very difficult to beat the Munstead strain. In this the flowers are of enormous size and splendidly clear colouring, with well defined eye and ranging from pure white through cream and yellow to a rich orange in colour. Apart from these are the equally large crimson, brown, red and bronze shades, which for depth and richness are unsurpassable. Finally, let us not forget the distinctive blue, which in some cases really is blue, although in others it is mauve or heliotrope. Selection of the seed parents in the garden will soon work wonders in the direction of blueness.

We have spoken of their utility as spring bedding plants of a high order, but one should look farther than that in the widest conception of the word garden. Nearly allied to the



excessive, but please remember that we are growing *large* plants, and, as a set-off against the space required, fewer of them will be needed when planting time comes. Pricking out completed (and both in the case of July or January sowings this may generally be done in early April), well water the plants overhead and repeat this at intervals—if the weather continues dry—until they are well established.

Through the spring and summer but little attention will be needed, save an occasional hoeing to keep down weeds; while, in long spells of drought, the hose may be turned on to them once a week until the soil is thoroughly soaked. Towards the end of July or early in August, surface roots begin to evolve from the neck of the collar of the plants, and this is just the moment when a top-dressing of rich earth is amply repaid. The material from beneath an old hot-bed, passed through a fine sieve, can scarcely be excelled. Work this close up to the plants, and again water well, and an almost magical output of strong deep green leaves will result.

Planting in the permanent quarters should not be deferred too late into the autumn, mid-November being quite late enough for the last plantings. Lift with a good ball of earth—an easy matter, owing to the mass of fine fibrous roots—and transfer to the beds and borders with the least possible delay. The best soil is a rich, somewhat greasy yellow loam, but any soil will give superb masses of flowers if it is well manured and the soil is not allowed to become dry in March and April.

Splendid results may be obtained from seedling polyanthus where these are grown in pots and flowered in a cold frame: for not only is it possible to anticipate the outdoor display by some weeks by the aid of this protection, but



A BORDER OF THE LIGHTER COLOURED POLYANTHUS OF THE MUNSTEAD STRAIN.

absolutely spotless purity is ensured. Where a few plants are grown in this way, it is worth while to procure enough of the fibrous greasy loam—mentioned above—for potting, and, in the case of large plants, a 7in. or 8in. pot will not be too large. Drain the pots efficiently, plant in autumn, and at once transfer to cold frames: although the lights should never be entirely closed, except in the case of severe frosts. Keep always evenly moist, but avoid over-watering, and, directly the buds can be seen, begin to feed with weak liquid manure. Under this method, truly enormous flowers of intensely vivid colour will be produced and, if the pots are removed to a cool house, the successional trusses will maintain a decorative appearance for many weeks.

The alternative method of propagation—division—is useful in the case of an exceptionally good form appearing among the seedlings, for one can by this means obtain a good stock of plants comparatively rapidly, and then, by judicious crossing, seed, more or less true, may be procured. Division is a simple matter and readily carried out immediately subsequent to flowering. Lift the plant with the spade and separate into single crowns, each with a few roots attached, and immediately replant these in a semi-shaded border in exactly the same way as with seedlings. They are far more liable to droop, however, and for some days—unless the weather is showery—spray overhead through a fine-rosed can, so as to re-establish as rapidly as possible.

Like its very close relation, the primrose, the uses to which the polyanthus can be put are almost unlimited. Whether planted in beds, masses or drifts, in woodland or in the rockery, in some shaded crevice or nook facing south and west, they give abundant pleasure by their myriads of bright coloured blooms at a time when colour is lacking in the garden.

H. W. CANNING-WRIGHT.



A FINE GROUP PLANTED FOR NATURAL EFFECT AT HALLINGBURY.



# BOOKS ABOUT PLANTS.—I

## GARDENING AND LITERATURE.

SO much has been written about flowers and so many people are afraid of reading about them in case they should be bored. They rush to a novel or a magazine and perhaps keep vaguely a standard book on gardens to be pulled out of the shelves and used as a work of reference. To those of my readers who read gardening books as a pleasure and may even possess a horticultural library, I say, like Farrer, "Skip, Aunt Agnes"; at the present moment I am talking to those who may not know the delights of floral literature, and who do not know where to begin.

There are lucky mortals who find delight in spending an hour in reading snippets here and there out of the Encyclopædia Britannica or Mrs. Beeton's Cookery Book. For those I can straightway advise the purchase of Nicholson's Illustrated Dictionary of Gardening, in five volumes, with supplement, a work long out of print but obtainable second-hand at about £5 5s., and a very good five guineas' worth, or Farrer's "Rock Garden, two volumes, published by Jack, or any other standard work on gardening or a class of gardening. But to those who are not such voracious readers, the first start is to find out how others love plants, and see plants, and write about plants. It matters not whether you know the plants described or not, so long as you have a genuine love of flowers, because, after all, you love flowers for their beauty and the enjoyment they give you and it is as easy, though, truth to tell, far from common, to write good English about plants as it is about anything else on which our literature is founded. Once you have become interested it is only a very short step to the fascinating subject of botanical and horticultural history, the folk lore of plants, their physical development and so on. In time, perhaps, you may, if you so wish it, desire to follow up a particular family or genus, or to discover for yourself the reasons for a plant disease or a plague of insects, and so books on specialised subjects are purchased and the nucleus of a botanical library is formed. Then again, the pictorial side may have its attractions, and volumes of books on flowers, with marvellous coloured plates will be sought for, but this is a branch which has passed its heyday, owing to the present-day cost of the best colour printing, and if the best is required, so are considerable knowledge and a deep purse.

In order to acquire a taste for gardening books as literature there are a number of old authors and at least two modern ones whose writing is full of charm and is yet information. Of the old I can bring to your notice William Lawson, whom Miss Rohde calls the Izaak Walton of Gardening. His best known book is called "A New Orchard and Garden," of which the first edition was published in 1618. It ran through many editions and the later ones can be picked up for a few shillings. It describes a North Country garden and breathes the love of the country and of flowers. Probably the most famous of all gardening books is the "Paradisus" of John Parkinson, which first appeared in 1629. Later editions are not difficult to obtain and there are also reprints. Parkinson was always inspired with the simplest delight in all garden flowers and this book is of the pleasantest reading. For those who wish to delve more deeply into the subject of old English books on gardening, before actually purchasing them, I cannot do better than advise them to read Miss E. S. Rohde's two charming

books on the subject, "The Old English Herbals," published by Longmans Green in 1922, and "The Old English Gardening Books," published by Martin Hopkinson in 1924. In the first she deals with those which give lists of plants and herbs, but it is a mistake to say that they make dry reading; although they are not suitable for devouring at a gulp, yet they are crammed with quaintness and are full of garden lore. The second deals with such books as were written on the art of gardening. Both of Miss Rohde's books are excellent. They are full of quotations from the various volumes, quotations which whet your appetite to read more.

So much for the old books. New books, which combine gardening and literature, are rather more difficult to advise upon, for people nowadays are too much inclined to take up gardening as a scientific pursuit, or hobby, or whatever you like to call it, with the result that modern books on the subject are written for practical people with little thought as to their literary value. There are, however, two authors who are pre-eminently readable; one is Sir Herbert Maxwell and the other the late Reginald Farrer. As an example of the work of the former, let me commend to your notice "Flowers, A Garden Notebook," published last year by Maclehose and Jackson. In this Sir Herbert tells of his own garden at Monreith, in Wigtownshire; there may be plants mentioned therein which it is impossible to grow in less favoured parts of the country. We may envy his good fortune, but at least he shares it with us in his charming book. And of Farrer's many volumes—they are all so good and so full of rich meat that it is impossible to pick and choose. My choice, however, is made easier by the fact that a number of them are out of print. Of his two great plant-travel books, one, "On the Eaves of the World," is exceedingly scarce, but the second, and to my mind the better of the two, called "The Rainbow Bridge," is still in print and is published by Edward Arnold. In it he describes his second year's journey in the Tibeto-Kansu border and with such charm and such insight that it is surely one of the great books. There is nobody who has such power of carrying his reader with him, whether it be on the crest of a wave of enthusiasm or in the depths of despair because the harvest is not so rich as was expected. Every chapter is spiced with his experiences and his descriptions of the people and of the scenery.

I hope I am not being unfair when I say that Farrer is the outstanding feature in modern gardening literature, as apart from the gardening text books. Other of his earlier books which exhibit the same feeling and felicity of expression are "In a Yorkshire Garden," published by Edward Arnold, and "Among the Hills, a Book of Joy Among High Places," published by Headley Bros. There are others, but they deal more with specialised subjects and will be mentioned later.

By such books as these, then, you may learn that a small, and very select, library may be formed, which will combine both pleasure and profit in the pleasantest form. In further articles, I will give selections of general gardening books and also of works on specialised subjects, but it must be remembered that these are only suggestions from a list which is particularly extensive, for there is no hobby so well served by its teachers as gardening.

M. C. E.

## SERVICE FOR READERS

Though so many subjects are dealt with in each issue of THE GARDEN, it must constantly happen that readers seek information which is not immediately available. In such circumstances they should make use of our new Service Department. Through its medium each reader's own particular enquiry can be dealt with. No matter what the question is, whether advice is sought as to—

RESTOCKING A GARDEN, COLOUR SCHEMES FOR GARDENS, THE BEST PLANTS FOR CERTAIN SITUATIONS, WHERE TO OBTAIN NEW AND RARE PLANTS, INSECT PESTS, NAMING OF PLANTS, AND THE HUNDRED AND ONE OTHER DETAILS RELATING TO THE GARDEN—

there is always information available from a staff of expert contributors and consultants; and there is no charge for this. It is one of the additional means of Service which THE GARDEN is glad to render to its readers.

Also, there is the further convenience which the Service Department affords of supplying readers with data about anything that is advertised in the pages of the paper. Thus, on receipt of an enquiry, particulars will be sent of, say, half a dozen things about which the reader seeks information. The only stipulation is that a stamped addressed envelope shall be sent with the enquiry.

All communications should be addressed to the Service Department, THE GARDEN, 20, Tavistock Street, Covent Garden, London, W.C.2.

PLEASE REMEMBER TO MENTION "THE GARDEN" WHEN ANSWERING ADVERTISEMENTS.



# LITTLE-KNOWN VEGETABLES

IN THIS ARTICLE THE AUTHOR DESCRIBES A FEW VEGETABLES WHICH DESERVE A MORE WIDESPREAD POPULARITY IN THIS COUNTRY. THEY ARE OF EASY CULTURE AND GIVE EXCELLENT RESULTS.

**A** NUMBER of vegetables are not grown in England to the extent they might be. Yet, their culture is, in most cases, no more difficult than that of any other vegetable and they should be most welcome for making a change in the daily diet of many. The reason is that probably few people have heard of them or realised the possibility of growing them in their garden. Below are a few notes on some uncommon vegetables.

**CHINESE ARTICHOKE (Stachys).**—Although not a striking vegetable, this is worth growing in small quantity in every garden, owing to its curiosity and its ease of culture. The plant produces numerous conical, small, ring streaked, white rhizomes. Propagation is carried out by tubers planted two or three in a clump, 18 ins. apart, in any good ground, during March and April. They can be lifted at any time during the following winter.

**JERUSALEM ARTICHOKE.**—This is more usually considered a forage or industrial plant than a vegetable. A few varieties, however, are well worthy of cultivation in the kitchen garden. Among these, Fuseau, a new variety, stands out prominently. It has, as its

name implies, a smooth spindle shape, is of a light pinky colour and contains a high percentage of sugar. The common, red tubered variety can also be grown, but less conveniently. The cultivation of this vegetable is easy. Tubers planted in March in any soil give a bountiful crop the following autumn. Like the Chinese artichokes, the tubers must be lifted only as they are wanted, for they do not keep long out of the ground.

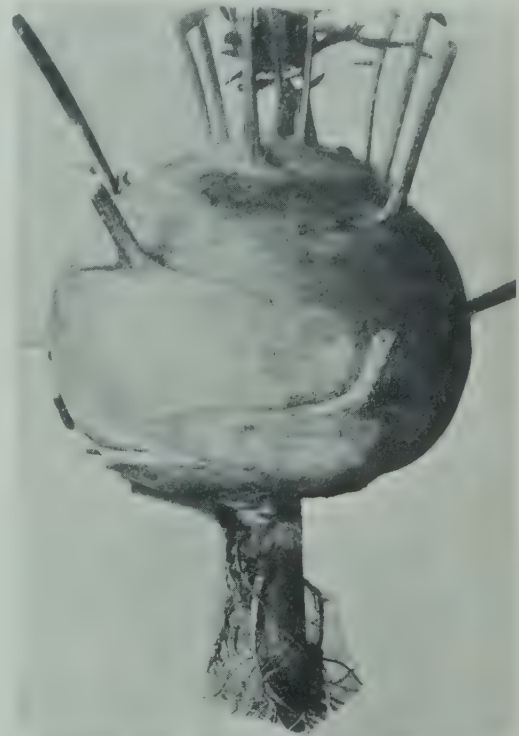
**TURNIP-ROOTED CHERVIL.**—A fine vegetable, rarely found in gardens nowadays; this is a great pity. The plant produces a small, white, fleshy root, similar to a small carrot, of a very refined taste and always much appreciated by the connoisseur. A very important point about this vegetable is to sow the seed in the autumn, or store the seeds in sand all the winter.

**COMMON CORN SALAD.**—Of very easy culture, this hardy vegetable ought to be far more grown than it is. It is certainly one of the best winter salads, and is in season from September till March. The plant forms small rosettes of vivid green or, in some varieties, light green foliage that can be eaten in the same way as every salad. Often grown as a catch crop, corn salad is sown broadcast in August after the ground has been cleared of other crops, such as onions, French beans, etc. Little trouble need be taken, the ground being just hoed superficially and then raked over for covering the seeds. For harvesting, the whole plant is simply cut with a knife.

**ENDIVE.**—Two kinds of endive are cultivated, one with finely lacinated foliage and the other with almost entire and serrated foliage. Endive is invaluable as a winter salad. Owing to their rather hard texture, they are bleached before consuming except, of course, when intended for cooking. Sowing takes place in July and beginning of August, and the plants, if grown in good soil, are ready to eat from October till January and February. If they are to be eaten during the early winter months, a good way to protect the plants against cold and to bleach the leaves, is to cover the beds with dry leaves and straw. It is best to transplant them to a cellar or cold frame if they are not required till the spring.

**KOHL RABI.**—Commonly cultivated as a forage crop, there are several varieties of kohlrabi that are useful for culinary purposes, when eaten in a young state. Unlike turnips, swedes, etc., the edible part in this plant is not the root, but the stem that becomes fleshy and spherical above ground. Probably the best variety to cultivate is Early White Short Leaved, a kind that grows quickly and is always tender. If intended for winter use kohlrabi is best sown late in the season, that is in June or first weeks of July. It has a taste half cabbage and half turnip and can be cooked in the same way as either of these vegetables.

**SUGAR (or MANGE-TOUT) PEAS.**—In this class of peas, pods and seeds are eaten together, owing to the absence of



THE BULBOUS STEM OF KOHL RABI SHOULD BE EATEN IN A YOUNG STATE.

fibres in the pods. These peas are exceedingly good and one wonders why they are not more commonly cultivated in England. A reason may be that the birds are very fond of them, but nets are a safe remedy. Quite a number of varieties, dwarfs and climbers, exist, among which one of the best is probably Tall White Flowering Scimitar, or Crooked Sugar, a climber. Sowing takes place, as in ordinary peas, from February-March till June and July, in good, rich, open ground.

**SWEET POTATO.**—Mention may be made of this curious vegetable, which is very common in the tropics, but rather difficult to grow in our northern climate. Gardeners who have greenhouses can nevertheless attempt it. Young plants are planted on an old hot bed in May or June when frosts are no longer to be feared. Plenty of room must be given them. The large, coloured tubers are ready in October. These tubers keep badly and must be used in a comparatively short time. The best way of propagation is to take cuttings every year from tubers wintered in a very dry corner of a hot greenhouse, or to root them in July and August and winter them also in a hot house.

**SALSAFY and SCORZONERA.**—These two vegetables are much alike, except that the first has white and the second black roots. Both are much appreciated by the epicure. The cultivation of these vegetables is easy. Seeds, which one must get from a reliable source (its germinating



SCORZONERA, A MOST USEFUL WINTER VEGETABLE.



power lasting only one year), are sown in March in deep ground in rows 1ft. apart. They ripen during the winter, while scorzonera, which is a true perennial, will last for several years.

NEW ZEALAND SPINACH is essentially a sun and heat lover. It is sown at the end of May in pots in a greenhouse or in a frame and planted when large enough in the open air. An ideal place to plant it is on an old hot-bed where

plenty of moisture can be given. The leaves, which can be cut all the summer, have the same flavour as ordinary spinach.

YAM (Chinese).—The old variety of Chinese yam had the great disadvantage of being too long (often 2ft. to 3ft.), and so was very difficult to lift. Of late, however, a variety, "Chappelier's Improved" has made its appearance, which can be recommended. The tubers are about 1ft.

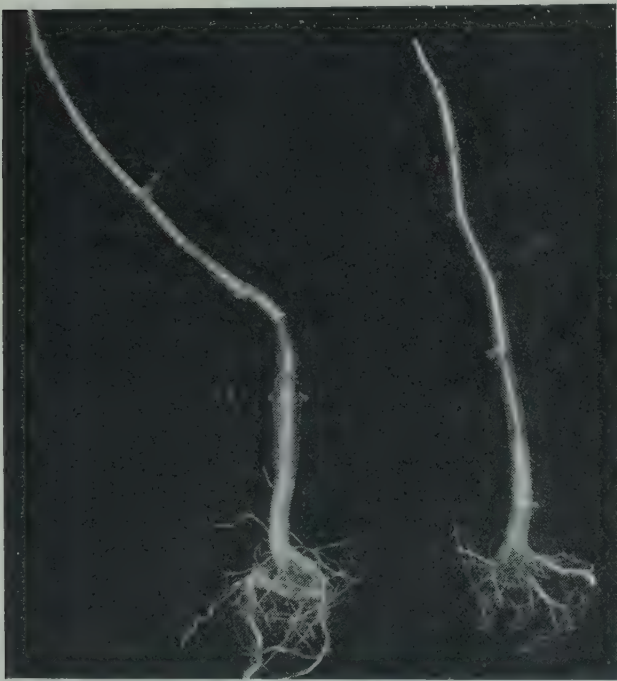
long, yellowish and in the shape of a club. The cultivation of the yam is fairly easy. After lifting, the thin top part of the tubers is retained, cut into lengths of 1½ ins. or 2 ins., which are put in sand in a cellar till March, when they are started into growth in a house and planted in the open during May or June in deep, rich ground. The plants can be left two or more years on the same spot without disturbance.  
C. L., Paris.

## PENTAPTERYGIUM SERPENS

BY L. B. STEWART

SOME time ago there appeared an article in THE GARDEN (July 12th, 1924, page 489), on the fruiting of this plant by Miss M. Mitchell. The fruit, after the drawing had been made, was taken and the seeds extricated. They were thickly coated with mucilage, and after sowing were not very long in showing signs of germination. After three weeks the seedlings which had germinated began to show the characteristic swelling of the root-stock—the swelling taking place from the primary tap root. When the swelling begins

a certain size and has grown out from the stem there is a gradual bending downwards of the point end of the swollen portion. After the swollen portion gets into position it is gradually pushed up until it is above the level of the ground. Its irregular shape may be the result of this bending. The cutting certainly never has the appearance of the seedling, and often sends out two or more of these swollen fleshy root-stocks. It is, however, quite the reverse in propagating plants which have a highly developed hypocotyl, such as is found in *Sterculia rupestris*.



On the left.—SEEDLING OF BURSERA SHOWING WELL DEVELOPED HYPCOTYL.  
On the right.—STEM CUTTING.



A THREE WEEKS OLD SEEDLING OF P. SERPENS SHOWING THE REGULAR SWOLLEN ROOT-STOCK.



STEM CUTTING OF PENTAPTERYGIUM SERPENS WITH THE IRREGULARLY SWOLLEN ROOT-STOCK.

to take place the seedlings commence to press this swollen portion on to the top of the soil, and from the base of this swollen portion other ground roots are formed. The small root-stock is circular in shape and uniform, but whether it will keep this uniform shape is very difficult to say at present. The object in sowing the seed, however, was to find out if it was fertile or not, as the plant is very easily propagated from stem cuttings, which is the method usually adopted in this garden. The interesting point, however, is that it is the primary tap root which gives rise to this swelling at a very early stage, whereas with the cutting it takes a considerable period before the roots begin to show this swollen root-stock, and although the swelling makes its appearance it is never so regular and uniform as it is in the seedling. The length of time taken by the cutting to produce this swelling may be due to the fact that the kind of root to be produced is not present among the first roots sent out, but is a later development. When a cutting begins to form this swelling it grows upwards in the pot. After it has attained

Here one finds that the hypocotyl has grown into an enormous size when the plant has been raised from seed, but should cuttings of this plant be rooted it will be found that no swelling takes place. The plant having lost its characteristic, by the absence of the swollen portion, is difficult to distinguish.

Many other plants show highly developed hypocotyls—such as *Bursera*—which are of high economic value, and great care has to be taken to prevent the hypocotyl from being buried. At Edinburgh they are always potted with the roots showing on the surface of the soil. When branch cuttings are rooted they can be handled with impunity, as it does not seem to be of any importance to them how they are potted, and shows the grower that he has got rid of the dangerous part of the plant. Whether or not this mode of propagating *Bursera* commercially would prove to be a success, has yet to be evinced, and I expect much would depend on the growth of the cutting compared with the growth of the seedling.



# SOME ROSES FOR THE WILD GARDEN

BY E. H. WILSON.

## ROSA SOULIEANA.

THIS is an extremely vigorous species of musk rose, common between 6,000ft. and 10,000ft. in the warm, dry valleys of the rugged region which forms the Chino-Tibetan borderland. When isolated it forms dome-shaped, tangled masses 20ft. high and as much through, but on the edge of the forests it is more rampant. It has grey stems which, as in all its class are freely armed with hooked prickles. Its leaves are grey-green and the flowers, borne profusely in flattened round clusters, open yellowish and change to white.

The fruit is ovoid and orange red. The flowers are each about 1½ ins. in diameter and the trusses from 5 ins. to 6 ins. through. It was discovered near Tachien-lu by Père Soulie of illustrious memory, who sent in 1896 seeds to M. Maurice de Vilmorin, with whom it first flowered in 1899.

Though native of an upland region this rose has not proved hardy in the Arnold Arboretum, though it flourishes at Kew where it has been growing for a quarter of a century. It is well adapted for the wild garden, where it can ramble at will and, untouched by the pruning knife, display the beauty of its flowers, its luxuriant foliage and attractive fruits.

## ROSA MULTIFLORA CATHAYENSIS.

With its pink blossoms and bright yellow anthers this is one of the prettiest of wild roses and, moreover, one of the most interesting. It is a common rose in China, favouring sandy and rocky places beside streams up to altitudes of 6,000ft. In habit it is variable, for the stems may be prostrate or erect, but it is best as a bush from 5ft. to 8ft. tall. On rocks it generally forms a dense mass with arching stems. The flowers are produced in erect flattened clusters, which, standing well above the foliage, garland the whole plant in pink of the purest hue.

This rose is the wild parent of the Polyantha rose, the old "Seven Sisters Rose," and of the famous rose "Crimson Rambler," which have been cultivated in China probably for centuries and long before they were known in Western gardens. Of perfect hardiness, this wild form is more lovely than many of the modern rambler roses raised and grown in the West and is worthy of a place in gardens where beauty in simple flowers is appreciated.

Forms of this rose with double flowers were introduced into England as long ago as 1804, but the wilding itself was apparently quite unknown in Western gardens prior to 1907, when I sent seeds to the Arnold Arboretum.

## ROSA HELENÆ.

Of the half dozen and more musk roses of China, Rosa Helenæ has proved the hardest of those introduced into Western gardens. It is an exceedingly



ROSA SOULIEANA ON ITS NATIVE HEATH IN THE CHINO-TIBETAN BORDERLAND.



ROSA MULTIFLORA CATHAYENSIS. A BEAUTIFUL WILD RAMBLER WITH PINK BLOSSOMS, FOUND IN SANDY AND ROCKY POSITIONS.



THE HARDEST OF ALL THE MUSK ROSES WHICH HAVE BEEN INTRODUCED TO WESTERN GARDENS IS ROSA HELENÆ



common rose in the mountains of Central China, its blossoms perfuming the countryside in June. It is a strong grower with arching canes from 6ft. to 12ft. long, plenteously armed with stout, hooked prickles. The leaves are from seven to nine foliolate, deep green above, grey-green below, sharply toothed and glabrous except on the petioles and principal nerves on the lower surface. Along the full length of stout canes short shoots are developed, each terminating in a

large, rounded cluster of pure white, delightfully fragrant flowers, which are followed by orange to red, ovoid to obovoid hips. The individual flowers are about 1½ ins. across with a cluster of conspicuous yellow stamens and are singularly beautiful.

In rocky places from river level to elevation of 5,000ft. this rose is abundant in Western Hupeh and Eastern Szechuan, but it has not yet been reported from farther west. In wayside thickets and

on the banks of streams it forms dense masses often 20ft. high and as much through, and on the margins of woods it entangles and drapes small trees. At the Arnold Arboretum it is quite hardy, withstanding as much as 45° F. of frost. On limestone soil at Rochester, New York, it thrives even better than around Boston, Mass. The author's appreciation of the musk rose may be gauged from the fact that it is named after his wife.

## THE FIG

**T**HE fig, one of the most delicious of all fruits, is often overlooked and not grown, yet it is quite certain that no choice or dainty sweetmeat excels a White Ischia fig when, growing in a sunny position, it is bursting with ripeness.

The fig may be a somewhat unappreciated fruit because an imported green fig, picked unripe, as it must be, bears no comparison in flavour with the home-grown fruit picked ripe.

Again, the cultivation, in no way difficult, is different from other fruits. It is more fruitful on poor soils than on rich, yet when carrying its fruit pays for feeding with liquid manure.

Under glass, if forced, the fig may produce three crops of fruit a year, while two crops (one coming on the previous season's wood and one on young wood) may be expected on trees in an unheated house if grown against a hot wall.

Outside, the fig succeeds well on a south or west wall for preference, as it is in such places where red spider would be rampant on some plants, that the fig is at home. Without the reflected heat of a wall the successful crop of fruit is less certain, but quite possible in some districts. Most important details outside are restriction of the roots and selection of varieties.

In the open, and especially in rich or deep soils, the roots should be confined to a restricted area, or the trees produce an excess of fruitless growths; a brick or concrete floor 2ft. down will secure the tree against a downward tendency of the roots, which should afterwards be pruned if the tree develops too grossly.

Visitors to the East Coast town of Deal may obtain a good lesson in fig-growing in the moat in Deal Castle, against the walls in shallow soil. The fig likes a soil in which lime is present and mortar rubble or chalk are valuable ingredients of the soil. Grown in this suitable but poor soil, liquid manure produces immediate results if applied when fruits are swelling. Brown Turkey and Brunswick are the two recognised

varieties for outside, but others will do in a warm position.

Under glass, when grown in pots, the cultivation of the fig is quite easy.



THE FIG MAKES AN EXCELLENT POT PLANT.

If planted in a border it is essential to restrict the roots, while at the same time to see that there is ample drainage, for a water-logged soil will not do. For the same reason, when in pots the compost should be open, the loam lumpy and unscreened, in proportions of two-thirds of the latter to one-third sand, manure (rotted), mortar rubble or chalk in equal proportions, and some bone-meal or hoof and horn is a good addition, at the rate of a 7in. potful to the barrow-load. Pots should be double crocked, or, better still, have a layer of ½ in. bones to ensure good drainage.

An additional interest may be found in the fig, which is the first tree mentioned in the oldest book and history of the world; but to the modern and materialistic mind its luscious flavour and ease of cultivation should be an attraction. It is quite a popular fallacy that the appreciation of the green fig is an "acquired taste," and I have never met the individual who did not admit to this after tasting a fully ripe White Ischia. It was the late Mr. George Bunyard, a fine judge of quality and flavour, and the greatest connoisseur of good fruits in his day, who first pointed this out to me.

The different varieties are worth a little study, for most of them have their good points. My selection of the best would be as follows, placed somewhat in their order of general merit:

**BROWN TURKEY**, the most easily grown inside or out.

Large, with brown skin and red flesh, very luscious.

**WHITE ISCHIA**, small, but very sweet. Skin and flesh pale yellow. Very free bearing.

**BLACK ISCHIA**, somewhat similar to the latter, but larger, with deep red flesh.

**NEGRO LARGO**, the largest fig grown, with the finest appearance, but not so fruitful as others. Skin black, flesh pale green, tender and juicy.

**BRUNSWICK**, good for inside or out. Forces well. The large fruits are brown, with purple flesh of high flavour.

**BOURJASSOTTE GRISE**, fruit of good size, with blood red flesh, juice thick and syrupy. One of the best.

**VIOLETTE SEPO**, large fruits, skin brownish purple, flesh deep red. Excellent flavour.

**WHITE MARSEILLES**, one of the best early varieties to force. Skin pale green, flesh opaline.

**OSBORNE'S PROLIFIC**, an excellent variety for early work and forcing. Skin brown, flesh white, good quality.

Growing any fruit is a fascinating hobby and a profitable occupation; the cultivation of figs is not the least absorbing, as those who have a greenhouse or a warm corner outside will prove if they give them a trial. L. J. Cook,



# WINTER SPRAYING

LAST season was remarkable for its exceptional freedom from plagues of aphides, or "blight," as the countryman calls the whole tribe of green fly and its relatives, but what we gained by the absence of these pests was to a great extent lost through the vigorous offensives of hosts of caterpillars. The various mites, maggots and grubs that infest apples and pears, and a whole catalogue of parasitic fungoid diseases of large and small fruits, roses, and some ornamental trees, have made a merry time of it at the expense of orchard and garden owners, and the truth of the matter is that the need for spraying is urgent.

The old familiar admonition in regard to the necessity for spraying before the enemies gain a foothold, and the folly of waiting until serious damage has been done must, when one comes to think of it, have fallen on many deaf ears. That is the great handicap to progress, but it is very difficult to induce anyone to spend money, time and labour upon the task of fighting an unseen foe. Let one see his plum trees, and the young growths of apple trees or of roses smothered with green fly and away he will go for "Abol" or V. 2 Fluid, or nicotine wash and give the pests an uncomfortable half hour, but talk about green fly in the winter-time when the trees are bare, and it is like trying to interest him in a scheme for protecting Southend shrimpers against sharks. When mildew whitens the foliage of roses and vines the quest for cures begins, but how like the voice that cries in the wilderness is the plea for spraying against mildew with a copper sulphate spray, or with lime, sulphur and salt, while growth is dormant; and yet, careful and practical tests have proved that even the more susceptible roses and vines in houses which have to accommodate other kinds of plants can be kept clean and healthy by the winter use of one of these sprays.

The preparation of such spray fluids is quite a reasonable undertaking for extensive commercial establishments where many acres of fruit trees or roses have to be dealt with, but for private gardens it is cheap—probably cheaper—and certainly less messy and troublesome, to purchase one of the ready-made pastes or compounds which are put up in convenient quantities with explicit instructions as to how they should be mixed with water.

The ordinary rose mildew (*Sphaerotheca pannosa*) does not expire or migrate when, with the withering and fall of the foliage, its downy whiteness disappears, but it perfects its minute fruits, which under a powerful microscope have somewhat the appearance of half-formed blackberries with radiating hair-like filaments around the base, by which they attach themselves to stems, thorns, or to soil and stones around the base of the bush. These fruits remain dormant until spring, when they release multitudes of spores to develop their downy coating over the young growths as soon as weather conditions are favourable. Bordeaux

mixture, sprayed during the dormant season, will not harm the hard wood of the bushes, but will prevent the fruits of mildew releasing their spores. Cupram is a good spray to use on vines, peaches, etc., and it is effective against peach-leaf-curl as well as mildew. Cupram is made by mixing copper carbonate with ammonia but this again is much better obtained from qualified horticultural chemists.

It is during the dormant season that the best work can be done among fruit trees which are green and slimy with lichen and algæ. It seems strange that there should still be necessity for urging the importance of cleansing the bark of fruit trees and many ornamental trees also, but basing judgment upon the number of trees allowed to retain loathsome coats of greasy slime and green mossy fungus, one is driven to the conclusion that many owners of gardens are yet ignorant of the fact that these filthy coatings are not mere disfigurements, but are injurious impediments to the natural functions of the respiratory pores of the bark. One would imagine that if the sole result were to allow access to the tree for pruning or fruit gathering without getting besmeared with slime, it would be well worth spraying with a caustic alkali wash, but when the health and productivity of the tree are also at stake no legitimate excuse for the careless neglect that is so prevalent is to be found.

Still further to urge the folly of neglect in this matter, it is a fact proven beyond contention that the eggs of the most destructive of insect pests lie secreted and snug among the lichen of tree trunks, and by the destruction of the lichen the safe harbour for a myriad of pests is routed, and thus the caustic winter wash performs a triple service. Strawsons, Coopers, Abol and a number of other familiar names among horticultural chemists occur to mind as providers of excellent caustic winter washes, the basis of which is caustic soda. Needless to say the use of such preparations is work for intelligent men who, realising the nature of the compound they are using will exercise due caution that the spray is driven on to the trees to be treated and not over the faces and clothes of passers by. The operator will also be well advised to smear his face and hands with vaseline, and to take care to keep himself to the leeward side of the spray throughout the operation. A still day, rather than a windy one should be chosen for the work, and it is very essential that the machine should be thoroughly washed inside and out as soon as spraying ceases.

It is utterly inadequate and hopeless to rely upon one spraying, however thoroughly it may be performed, completely to restore to health old trees that have fallen victims to a variety of pests and diseases. Bear in mind that one pest or one disease opens up the way for another. Aphides weaken growth, and throw the shoots open to various fungi. American blight makes sores in the bark which let in canker, and so one might go on through a lengthy list of foes which

dovetail, support and follow up each other's operations like the units of a mighty army intent upon vanquishing the victims of their force.

The caustic wash clears the way for effective application of Bordeaux mixture, and it is well to mention that even canker yields to persistent effort with this copper and lime spray, which may, however, have to be used in stubborn cases for two or three successive years.

Lime-sulphur may, with advantage, be used a little later in the season, because not only will it prevent the hatching out of the first batches of aphides, but, applied in February, when the birds are prone to amuse themselves pecking out the fruit buds, lime-sulphur makes the buds unpalatable, and feathered marauders prefer to go elsewhere.

The firm of Lewis Berger has paid great attention to the preparation of a first-class lime-sulphur spray, and simple as it may appear, to read a formula for the making of such a spray and carry out the instructions, the best results can only be obtained by the most careful attention to the purity and relative strength of the ingredients to ensure an absolutely accurate balance.

Gooseberries, currants, loganberries and blackberries may all, with advantage, be sprayed with lime-sulphur as well as the tree fruits.

Many times I have urged that where a garden is surrounded by hedges of thorn, myrobalan, dog briar, etc., or where trees which harbour pests and diseases are within easy distance of the garden or orchard, it is well worth while when the job is afoot to douch these likely hosts or purveyors of the foes that are to be fought. There is no extravagance in using a gallon or two of wash and an hour or two of time to extinguish possible relays of the enemy, but there will be a good deal of labour in vain if this is neglected.

As spring advances, other pests need other poisons. Nicotine becomes extremely valuable when biting insects become active. Whenever nicotine is mentioned the name of G. H. Richards, Borough High Street, S.E., is called to mind, for his nicotine preparations must have a marvellous record of slaughter among the foes of the garden. XL All is an invaluable symbol of efficiency in insecticides, not only the tree wash, but the fumigating compound, which is a boon where glasshouses are concerned.

I have for years made a practice of adding a few drops of XL All Fumigating compound to all my ordinary soft soap-quassia sprays, and the effect of such reinforcement is very remarkable. If I were obliged to restrict myself to one insecticide, nicotine would be my choice. Psylla, and the terribly destructive capsid bug require this narcotic poison; and in spring, too, the use of arsenate of lead must be considered, especially if from any cause the trees were not effectively grease-banded to trap the wily wingless winter moths.

Rather than dismay the reader with a prolonged spraying programme for the



whole season, however, let it suffice for the present to reiterate the wisdom of concentration for a time upon caustic soda, copper and lime-sulphur in that order of rotation.

Owners of small gardens are somewhat handicapped because, while they can procure serviceable spray fluids in small quantity, they cannot obtain a spraying machine which just suffices for their

small needs, and do not feel justified in paying the price of a good knapsack. To such an "Abol" syringe is a real treasure. It will discharge as fine a spray as a machine at treble its cost, and it is, moreover, an implement for which there are useful and necessary tasks during the greater part of the year. In fact, no garden is too small to require a syringe, and no garden requires

a better one than an "Abol." The excellent insecticides bearing the same name are also praiseworthy, being safe and efficient during the whole active season of all kinds of biting and sucking insects. Owners of greenhouses will even now find work for "Abol" insecticide; its outdoor use will commence with the appearance of young spring foliage.

A. J. MACSELF.

## CORRESPONDENCE

### FLOWERS IN A CORNISH GARDEN IN DECEMBER.

SIR,—Readers of THE GARDEN may be interested to see the enclosed list of one hundred and eleven flowers in bloom out of doors in my garden, December 31, 1924.—  
CORNISH GARDEN.

Cyclamen coum	Magnolia grandiflora
C. europæum	Rhododendron
Viburnum lucidum	Nobleanum
V. Tinus	R. N. venusta
V. rotundifolium	R. arboreum seedling
Olearia Forsteri	R. Shirleyi
O. F. grandiflora	R. Strategist
O. stellulata	Eupatorium
O. Gunniana	Ceanothus Gloire de
Choisya ternata	Versailles
Raphiolepis ovata	Correa cardinalis
Diosma gracilis	C. corymbosa
Pernettya mucronata	Garrya elliptica
Acacia Baileyana	Fuchsia speciosa
A. ovata	F. fulgens
A. retinoides	F. spectabilis
Osmanthus ilicifolius	Brugmansia lutea
Banksia buxifolia	B. bicolor
Abelia chinensis	Berberis Darwinii
Abutilon	B. nepalensis
Veronica (3 varieties)	Cytisus præcox
Aponogeton	C. proliferus
Aralia Sieboldii	Cistus purpureus
Grevillea rosmarinifolia	Azalea amoena
G. sulphurea	Hibbertia
G. Preissei	Cassia corymbosa
Escallonia rubra	Dendromecon rigidum
E. exoniensis	Primula Fosteri
Erica carnea rosea	Mesembryanthemum
E. codonodes	Violet, double
E. arborea	Violet, single
E. Veitchii	Primrose
Hypericum patulum	Crocus (blue)
Henryii	Geranium (4 varieties)
H. calycinum	Polyanthus
Hamamelis mollis	Aubrietia
Calceolaria Burbridgei	Iris stylosa
Hellebore	Stock, double
Genista	Stock, single
Diplacus glutinosus	Wallflower
Solanum jasminoides	Rock Cress
Sollya Drummondii	Geum Mrs. Bradshaw
Habrothamnus	Forget-me-not
fasciculatus	Alyssum
Jasminum nudiflorum	Chrysanthemum
Kerria japonica	(4 varieties)
Coronilla	Marguerite
Cianthus puniceus alba	Rose Eugene Resal
Hydrangea (blue)	R. Ards Rover
H. Menziesii	R. Excelsa
H. quercifolia	R. White Dorothy
Primula helodoxa	Perkins
Arbutus	Salvia (3 varieties)
Senecio	

[It may be interesting to our readers to compare this list with that given by another of our correspondents in the issue of January 10, 1925, page 25, from West Porlock, Somerset. It also serves as a useful indication of the climatic conditions which prevail in the south-west corner of England.—ED.]

### A FINE BROMELIAD.

SIR,—I enclose a photograph taken on December 20th, 1924, which may interest your readers. The plant is, I believe, *Rhodostachys andina* (Chili). The inflorescence consists of a number of flowers packed tightly together, and is of a pale blue colour. What made it more striking was that all the leaf spikes round it turned a deep crimson.

The plant was given to me by Mr. R. C. McM. Smyth, and came originally, I believe, from Sir Frederick Moore. It has been in its present position in my rock garden for three years, but has never shown flower before. I believe these *rhodostachys* rarely flower in the open air, and it seems very extraordinary that this particular plant should



RHODOSTACHYS ANDINA IN FLOWER OUT OF DOORS.

have chosen December for the purpose! I should be glad to hear if any of your readers have had a similar experience.—ALAN McMULLEN, *Kingstown, Co. Dublin.*

### A FLOWERING ALOE.

SIR,—With reference to Mr. William Clark's note in the Correspondence columns of THE GARDEN of November 29th, 1924, page 811, and his question as to whether the aloe figured will die after flowering, I may say that I never knew an old plant to survive after flowering, but plenty of smaller plants will probably spring up around the old plant—at least, that is my experience, having lived for thirty-three years in Latitude 34, Southern Hemisphere, where these plants are like weeds.—VERE CALDWELL.

### VEGETABLE SEEDS FOR A SMALL SUBURBAN GARDEN.

SIR,—If the writer who signs himself George Garner under "Simple Gardening" is the same as we have known and learnt from in

past years, he will, I know, allow me to criticise his sowing table page 13.

Would he really advise the owner of such a garden to sow a drill roofed long with an ounce of Globe artichoke seed? The plants grow rapidly and would by autumn cover a space 6ft. wide = 600 sq. ft. Again, I have on several occasions sown packets of this plant from noted seed houses, but found the seedlings very variable, only about 10 per cent. being of good quality.

Broccoli is to be grown and ½ oz. of seed is allowed. Probably this would produce 1,000 plants and more, but they would all be of one variety! Even a small garden would require three varieties—early, mid-season and late—to say nothing of early purple sprouting, one of the best winter vegetables for a small garden.

Celery seed is very minute and ½ oz. would be sufficient for a very large garden, whereas the smallest packet would suffice for the garden named. The same might be said of the 10z. of leek seed recommended.

If a pint of dwarf bean seed is necessary (800 average sized seed go to the pint), the allowance of two pints of peas can only be regarded as very scanty, especially as no fewer than 6,000 head of the cabbage tribe are arranged for.—J. COMBER.

### CROCUS IRIDIFLORUS.

SIR,—There are some most exquisite flowers among the true autumn-flowering crocuses, and, for those who appreciate the quiet, yet bright beauty of the charming cups of the crocus in the waning days, they present much to give them delight. I hardly know one of the species which is not of high beauty, yet, of course, there are some with paramount claims upon our affections. Such is *Crocus iridiflorus*, one of the most exquisite of all crocuses, though inferior in size to *C. speciosus* and the spring-flowering varieties of *C. vernus*. It is of unique form among the crocuses, the difference in the size of the inner and outer segments giving it something of the appearance of an iris, hence the name of *iridiflorus*, or iris-flowered. This distinction caused some botanists to confer upon it the honour of a separate genus, calling it *crocoiris*. But it is a true crocus, and amazingly beautiful. Its cups, of a kind of lavender, varied by the inner and outer segments being of different shades, are delightful and are enhanced in beauty by the striking coloured stigmata. It is my favourite autumn crocus, and, although more expensive than some of its allies, which also flower in autumn, is well worth the few pence a single corm will cost, and a dozen or more will not be more expensive than will be justified by the pleasure they will afford for a long succession of years. It flowers in September and following months, and is perfectly hardy. Mice are its only enemies, although a slug may take a fancy to indulge itself to the luxury of a trial of its delicate flowers. This crocus is not nearly enough known, and in sunny nooks of the rock garden or border it is exquisite. I hesitate to suggest it, but a sheet of glass above will prolong its charms for a longer period.—S. ARNOTT.



# SIMPLE GARDENING

## DAHLIAS.

THERE are dahlias to be obtained now that will suit every garden, whether used in beds for furnishing the garden with masses of flowers, in shrubberies or for exhibition purposes. They include cactus, decorative, collar-ette, pompon and single-flowered. It is very interesting work growing dahlias from seed, and amateur cultivators may succeed well with them, especially the single-flowered section. The seeds should be sown about 1 in. apart in deep pans filled with a good gritty compost during the early part of February. Of course, some artificial heat is necessary, a warm pit or greenhouse in which zonal pelargoniums are doing well will suit the dahlias. But it is with the raising of new stock from cuttings that we are mainly concerned about now. Readers of THE GARDEN who possess old roots should examine them very soon, now, during open weather, not while a frost prevails, and make due preparations for striking the first batch of cuttings. The latter may be rooted in a propagating frame in a heated house, or in an ordinary frame placed on a hot-bed. The inexperienced cultivator would do well to use the house and propagating frame for the earliest cuttings, as they are so liable to damp off on a hot-bed. First, place the old tubers in a box of soil and encourage the growth of suitable cuttings. These should be about 6 ins. long, prepared similarly to a pelargonium cutting and inserted in a nice gritty compost. After the first watering be watchful against damping off. A little ventilation will help to preserve them if applied judiciously.

## FORCING VINES.

Grape vines grown under glass are forced at all times between November and April; before Christmas by fire heat solely; immediately after, mainly by fire heat, the sun heat helping; and from the end of January onwards by fire heat much supplemented by that from the sun. Where sun heat alone is relied upon the vines begin to grow from four to six weeks earlier than those on outside walls. Late varieties of grapes need a longer period of growth than the early ones. To economise as regards fuel, the early varieties may be started by sun heat alone and mature the berries in due course. But the late ones, such as Muscat of Alexandria, Gros Colmar, Alicante, will require the assistance of fire heat and to be started by its aid several weeks before the date when it is safe to start the early varieties such as Black Hamburgh, Foster's Seedling, Buckland Sweetwater and Madresfield Court. The earlier the date of starting vines the more difficult the work is; the later in the spring the easier it is because the sun has greater power and the sap is rising more freely. Having pruned the vines at the right time the danger from excessive bleeding will not be great when the sap rises. Heat and moisture are essential to induce the growth of healthy young shoots. Every morning, except in frosty weather,

the rods should be syringed with tepid water; the rods should be dry at sunset. A temperature of 60° Fahr. by day and 55° Fahr. at night will answer well till the young shoots are 1 in. long, then 5° more will be beneficial.

## THE NEW ROCKERY.

The present is a good time to do much renovation work in the rockery garden, and also to build the new rockery, whether this be small or extensive. I use the word "build": it applies in the case of a rockery as well as in that of a wall, only the work is carried out in a different way. The drawings are made with a view to helping the inexperienced. A section is shown at *a*, it is the wrong way to place the stones; the right way is shown in the section *b*, where the



stones are properly placed. The front of a rockery is shown at *c*; the plants, shown at *d*, have plenty of soil to grow in, and the stones, when placed as shown at *b*, do not prevent the rain-water entering the soil as it trickles down from stone to stone and soil. Rockery stones should be laid flat, showing the grain, and not on end, as they are placed at *a*. When a rock wall is built the stones must be correctly placed. A small, well arranged rockery is more pleasing than a large one badly arranged. The following plants will be sufficient for a small rockery to begin with. To bloom in spring: *Alyssum saxatile compactum*, *antennaria*, *arabis*, *aubrietia*, *dianthus* (alpine pinks), *gentiana*, *irises* (dwarf), *phlox* (dwarf), *primulas*, *saxifrages*. To bloom in summer: *achilleas*, *Arenaria balearica*, *asters* (alpine), *campanula* (dwarf), *dianthus*, *primulas*, *Saxifraga longifolia*, *sedums*, *sempervivums*, *silene*, *veronica*, *auriculas* (alpine), *cyclamen*. *Cerastium tomentosum* should not be used; in

many cases it soon overruns the rockery and is difficult to eradicate.

## POTTING CHRYSANTHEMUMS.

The first batch of cuttings, inserted early in December, will now possess a few roots and soon be in a fit condition to be potted. When the roots reach the sides of the small pots they are well advanced in the case of cuttings inserted singly in the centre of the soil in small pots. Those inserted round the sides of larger pots will need repotting or potting singly where one plant to a pot is the rule. This shift should take place directly the young roots are about ½ in. in length. If the cuttings are allowed to remain in the cutting pots until the roots are entwined together the check will be much greater than would be the case if the potting was done much sooner; and checks to growth should be avoided as much as possible.

Having decided to remove the rooted cuttings from the propagating frame, place them forthwith in another one or in a box where they can be very freely ventilated for several days prior to their removal to a high shelf or stage in the greenhouse. Very careful watering will be necessary, a light spraying being sufficient in most cases for the few days the young plants remain on the shelf before they are potted. The compost should be a simple one, fibrous loam two-thirds, leaf-soil one-third, with a good sprinkling of coarse sand or old mortar rubble added. Pass all through ½ in. mesh sieve; use clean pots and crocks and return the newly potted plants to the shelf.

## BIG LEEKS AND ONIONS.

The cultivator of vegetables is generally enthusiastic about all details connected with the growing of big leeks and onions. Even the experienced cultivator takes heed of hints regarding management. Indeed, it is this alertness that enables a cultivator to grow the large specimens we often see at the exhibitions. I am not dealing with the merits or demerits of such specimens here, but simply their treatment. After very many years' experience I find it is much better to sow the seeds late in January rather than early. The seedlings raised early rarely grow as freely as those raised, say, three weeks later. Many plants that suffer a check owing to early sowing of seeds, run to seed, "bolt," and are worthless. Sow the seeds in boxes about 4 ins. deep. Place a very thin layer of well rotted manure in the bottom of the box, then the compost—fibrous loam two-thirds, old mortar rubble and leaf-soil combined one-third. Pass these ingredients through a ½ in. mesh sieve; the reason for this is that when the resultant seedlings are transplanted the soil falls away from the roots without breaking them—a very important point. Do not use any of the fibrous portion in the bottom of the box for the same reason. Sow the seeds thinly on a watered level surface and cover them lightly.

GEORGE GARNER.



## BOOK REVIEW

At the present rate of development of our knowledge in all scientific subjects—leading to an ever increasing specialisation, with the consequent formation of many new branches in each study—it becomes increasingly important that the elementary student when he commences to dip into the realms and mysteries of science, whatever his branch may be, should be furnished with as broad an outlook as possible, embracing all the main points of all these separate threads, yet showing as far as possible the correlation which exists between them all. At the present day the relationship between these branches of a subject is apt to be lost sight of. They become as islands on a wide expanse of ocean, and consequently the beginner, unless he be of a critical and observant nature, is altogether misled as to the confines of his subject. Elementary text books these days are hence not judged according to the material they contain, but rather by the manner in which the subject matter is presented, so that the elementary student may find a sufficiency of pegs on which to hang his facts, and also that those pegs may be adjusted to fit their allotted holes. Everyone, before he can become a specialist, must have a firm and secure basis or groundwork on which to build his specialised knowledge, otherwise his specialisation, through the lacking of the fundamental and basic laws which govern all scientific theories, may probably crumble like the house which was built upon the sand. These notes are applicable to botanical study especially, and arise out of the volume which we have under review, "A Text Book of General Botany," by the Botanical Staff of the University of Wisconsin (Macmillan Company, New York, 16s. net). The book is the result of the experience of the authors in the teaching of elementary botany in that University in the first year courses, and as such appears to be most comprehensive for such a short period as three terms. Throughout its pages, however, there is a sustaining interest, since the authors have attempted, more or less successfully, to present the subject as an unbroken whole, while at the same time indicating how the various side-lines hold and offer untold opportunities for the workers in that particular direction. The intimate correlation which exists between form and function and which is so necessary for the elementary mind to grasp is not lost sight of. It is pointed out in many different aspects. The general treatment of the subject, if followed as outlined in the chapters is a good one, as it serves to present these many isolated facts as links in a continuous evolutionary chain or sequence of events. Starting from the simple cell of which the structure and functions are well discussed, the authors work through the main parts of the plants. A few chapters on elementary physiology follow, after which the reader commences at the lowest rung in the ladder of plant life, namely, the algæ and fungi, and is conducted through these to the mosses and liverworts, from thence to the ferns, gymnosperms and on to our present-day flowering plants, the angiosperms. These groups are illustrated by means of selected types, which method, although attended with many evils, has, of necessity, to be followed by all teachers of such a wide subject in an elementary classroom. The chapter on the classification and families of the flowering plants is, in our opinion, perhaps too brief; more space might have been devoted to it and less to the chapters on the lower groups, as, after all, these are subservient to the typical flowering plants in such a text book, where the student first and foremost should become thoroughly acquainted with the flowering plants as far as lies in his power after a year's study. Several chapters towards the end

are of general interest, notably two on Inheritance, Variation and Evolution, where all the known fundamental facts are clearly and concisely expressed for the benefit of the beginner. A useful concluding chapter serves to present to the reader the economic importance and significance of plants in the general scheme of things. It is copiously illustrated throughout by means of line (*camera lucida*) drawings and half-tone blocks. A few English terms such as "microsporangium" are Americanised into "microsporangia," but such is of no importance unless it is that it is unfortunate that the nomenclature and terms which have already seen adequate service and have now come to be universally employed should be cast aside. There is nothing that is new to the botanist in its pages, but to the American student it will prove its worth as a useful text book, while to the teacher it will come as an accurate and clear presentation of the subject.

G. C. T.

### CATALOGUES RECEIVED.

MESSRS. FISHER, SON AND SIBRAY'S Gardening Manual for this year has reached our hands, and it is evident that the high standard of excellence which this firm has attained in the Midlands and throughout the country in general will be maintained during the year. Those who have had dealings with the firm will be well aware of the high quality of the seeds, and while that is maintained at its former level, an unlimited choice and variety is given to the intending buyer of vegetable and flower seeds. The firm has a long and well established reputation behind it, and we have no hesitation in recommending it to our readers. The address is The Royal Nurseries, Handsworth, Sheffield.

An extremely useful list of flower and vegetable seeds is presented by Messrs. William Cutbush and Son, Limited, Barnet, Herts. To our readers in the South this firm will be well known by its presence at the majority of the Royal Horticultural Society's shows. The amateur will find the catalogue of great service, as it recommends certain collections of flower seeds and also vegetable seeds, and those who do not wish to have the difficulty of choosing their own sorts thus find it solved for them. The varieties are chosen on a most liberal scale.

Another useful list of vegetable and flower seeds and a reliable guide to the best varieties for 1925 is that published by Robert Sydenham, Limited, Tenby Street, Birmingham. It is a handy size, and packed with information. We strongly recommend it to all amateurs who wish to have a good show in the gardens during the coming summer.

## POLYANTHUS STORRIE'S SCOTCH GROWN Seeds, Tiny Seedlings and Plants "Are still going strong."

"See the many coloured train  
Peeping upon Glade and Plain."

Write to the old FIRM at the old ADDRESS  
for comprehensive and up-to-date Catalogue.

**STORRIE & STORRIE**  
**GLENCARSE, PERTSHIRE**  
ESTABLISHED 1880.

## DULAU & COMPANY

LIMITED. (Founded 1792)

34, 35, 36, MARGARET STREET,  
LONDON, W.1.

NATURAL HISTORY AND GENERAL  
BOOKSELLERS AND PUBLISHERS.

We have the following books of the late Reginald Farrer in stock, either new or second hand:

On the Eaves of the World £3 10s.  
2 VOLUMES.  
The Rainbow Bridge - £1 1s.  
The Dolomites - - - 10s. 6d.  
A Yorkshire Garden - 15s.  
Among the Hills - - 15s.  
The English Rock-Garden £3 3s.  
Alpine and Bog Plants - 7s. 6d.  
My Rock-Garden - - 7s. 6d.

Postage Extra.

A List of useful Gardening Books sent free  
on application.

Please mention THE GARDEN when writing.

## Fruit Trees Rose Trees

ALL ENGLISH GROWN.

Descriptive Catalogue post free on demand.  
INSPECTION INVITED.

## S. SPOONER & SONS

Estd. 1820

The Nurseries, Hounslow, MIDDLESEX

Please mention THE GARDEN when writing.

## Tottenham District Council

### ORNAMENTAL GARDEN

The Council invite Tenders for the construction of a Sunken Ornamental Garden. The site is situated in Seven Sisters Road, between Manchester and Heysham Roads, and is approximately 160 feet by 120 feet.

Particulars and Form of Tender may be obtained from the Engineer of the Council, Town Hall, Tottenham, N.15, on payment of one guinea which sum will be refunded upon the receipt of a *bona fide* Tender accompanied by documents, not later than the date prescribed below, otherwise the deposit will be forfeited.

Tenders in sealed envelopes, endorsed "Tender for Ornamental Garden," must be delivered to me not later than 12 noon on Tuesday, the 20th day of January, 1925.

The Council do not bind themselves to accept the lowest or any Tender.

REGINALD C. GRAVES,

Clerk and Solicitor of the Council,

Town Hall, Tottenham, N.15.

5th January, 1925.



# OLTONS' The Leading House for SWEET PEAS

AWARDED 167 GOLD MEDALS.

ENGLISH SEED ONLY.

GROWN ON OUR FARMS.

Our Stocks are without doubt the finest in the world, due to the fact that we are the ONLY FIRM who specialises in SWEET PEAS.

**SEND FOR OUR NOVELTIES FOR 1925.**

Following are recommended with every confidence.

All are quite distinct and extra vigorous growers.

## ANGELE.

Award of Merit, York.  
Most striking and fascinating feature  
flower is its colour, easy indeed to  
state, but difficult to describe. The  
strike a new tone in blue-mauve.  
standards scintillate with a unique  
ton of pink-mauve, rendered more  
ing by basal flush of the wing colour.

Per packet — 10 SEEDS — 1/-

## EMPIRE.

A bright rose-pink; makes a telling  
bunch for exhibition.

Per packet — 10 SEEDS — 1/-

## MAMMOTH.

Award of Merit N.S.P.S.; Award of  
Merit, York; Award of Merit, Man-  
chester.

A bright fiery orange-scarlet; a great  
advance in this colour.

Per packet — 10 SEEDS — 1/-

## SUPREME.

Award of Merit, Manchester.  
A clear pink of uniform colouring.

Per packet — 10 SEEDS — 1/-

## WEMBLEY.

First-class Certificate N.S.P.S., and  
Gold Medal for Best Novelty of the  
Year.

Award of Merit, York.

Undoubtedly the largest and best pure  
lavender Sweet Pea ever introduced.  
Equally good for exhibition or garden  
decoration.

Per packet — 10 SEEDS — 1/-

All orders sent by return post.

No waiting.

Illustrated Catalogue Post Free on application.

**BERT BOLTON & SON, SWEET PEA SPECIALISTS, Birdbrook, Nr. Halstead, Essex.**

Please mention THE GARDEN when writing.

**BLACKMORE & LANGDON'S, BATH.**

## SUPERB POLYANTHUS

Awarded Silver Flora Medal, R.H.S., in  
1923, and Certificates of Merit.

Mixed Seeds, all colours, 1/-, 1/6 & 2/6 per pkt.  
a separate colours, White, Yellow, Fancy,  
crimson, 1/-, 1/6 & 2/6 per pkt. each colour.

## BLUE PRIMROSE. A SUPERB STRAIN.

Seed .. .. 1/6 & 2/6 per pkt.

Please mention THE GARDEN when writing.

## GOLDEN YEWS

THE FINEST STOCK IN GREAT BRITAIN.

Height, Prices and full particulars on application.

Such Plants cannot be adequately described on paper.

**PERSONAL INSPECTION INVITED.**

The Executors of the Late

**ANTHONY WATERER,**  
Knap Hill Nursery, Woking Station, Surrey

Please mention THE GARDEN when writing.

## KILOGRUB



Exterminates all Garden Pests in the soil.

Your Seedsman has it.

Tins:—9d., 1/6, and 2/6.

Tags:—1/2-cwt. 6/6. 1/4-cwt. 9/6. 1-cwt. 15/.

Write for particulars to the manufacturers:—  
**JOHN PEAK & Co., Ltd., Wigan, Lancs.**

A most interesting

# Fruit Tree Catalogue

Free and Post Paid!

THIS Catalogue, nicely produced and well printed, contains a valuable host of useful hints on **Fruit Tree Culture**—for Amateur and Professional. Herein will be found all the best and most popular Fruits for all purposes, alphabetically arranged for ready reference. A feature has been made of interesting Chats on soils, situations and fertilizers, in fact, it is a valuable book which should be in the hands of all those who possess a Garden or Fruit Farm, large or small. Sit down now, while the matter is fresh in your mind, and write for your free copy.

Established 1785. Awarded 86 Gold Medals.

**King's Acre Nurseries, Limited, Hereford**

Please mention THE GARDEN when writing.

## Messrs. LONGMANS' LIST

## MY GARDEN BOOK

Prepared for the daily use of all  
who own a garden big or little.

—BY—

**JOHN WEATHERS, F.R.H.S.**

With 24 Plates in Colour from  
Drawings by G. S. Elgood, R.I.,  
Miss Beatrice Parsons, Miss Ellen  
Warrington, and Miss Winifred  
Walker, and 392 Illustrations in  
Black and White.

4to. **36s. net.**

"Messrs. Longmans, Green and Co. have published many beautiful nature books, but this combines use and charm beyond any other book in their catalogue. It is a book to delight all the seed of Adam. It is an encyclopædia of its subject that all gardeners will not only like but love."—  
*Daily News.*

**RHODODENDRONS.** In which is set forth an Account of all Species of the Genus Rhododendron (including Azaleas) and the various Hybrids. By **J. G. Millais, F.Z.S.** First Series. With 17 Coloured Plates by Miss Beatrice Parsons, Miss Winifred Walker, Miss E. F. Brennand and Archibald Thorburn; 14 Collotype Plates and numerous Illustrations from Photographs. 4to, £8 8s. net.

**RHODODENDRONS AND THE VARIOUS HYBRIDS.** By **J. G. Millais, F.Z.S.** Second Series. With 17 Coloured Plates by Miss Beatrice Parsons, Miss Winifred Walker and Miss Lilian Snelling; 14 Collotype Plates and numerous Illustrations from Photographs. 4to, £10 10s. net.

**WOOD AND GARDEN:** Notes and Thoughts, Practical and Critical, of a Working Amateur. By **Gertrude Jekyll.** With 71 Illustrations from Photographs. 8vo, 10s. 6d. net.

**HOME AND GARDEN:** Notes and Thoughts, Practical and Critical, of a Worker in both. By **Gertrude Jekyll.** With 53 Illustrations from Photographs. 8vo, 12s. 6d. net.

**SOME ENGLISH GARDENS,** after Drawings by **George S. Elgood, R.I.** With Notes by **Gertrude Jekyll.** 50 Coloured Plates. Royal 4to, 50s. net.

**ITALIAN GARDENS.** After Drawings by **George S. Elgood, R.I.** With Notes by the Artist and 52 Coloured Plates. Royal 4to, 50s. net.

**ROSES:** Their History, Development, and Cultivation. By the **Rev. Joseph H. Pemberton,** Vice-President of the National Rose Society. With Coloured Frontispiece, 9 Lithographic Plates and other Illustrations in the Text. 8vo, 7s. 6d. net.

**THE OLD ENGLISH HERBALS.** By **Eleanor Sinclair Rohde.** With Coloured Frontispiece and 17 Illustrations. 4to, 21s. net.

**THE PROFITABLE CULTURE OF VEGETABLES FOR MARKET GARDENERS, SMALL HOLDERS AND OTHERS.** By **Thomas Smith, F.R.H.S.** With numerous Illustrations. 8vo, 8s. net.

**LONGMANS, GREEN & CO.**  
39, Paternoster Row, London, E.C.4

Please mention THE GARDEN when writing.



## ARTINDALE'S PLANTS ALWAYS PLEASE

### BEAUTIFUL FLOWER GARDENS

**S**HOULD you contemplate making a new Flower Border or adding to your collection, write for our new Catalogue of Hardy Plants. We can supply your requirements and give satisfaction. We guarantee to supply strong healthy clumps (not miserable offsets as are so often supplied).

In Open Competition this year we have gained the following awards:

**1st Prize.** Royal Agricultural Show, Leicester, for Group of Hardy Flower roots. **1st Prize.** Royal Agricultural Show, Leicester, for Herbaceous Border. **1st Prize.** Yorkshire Show, for Herbaceous Group. **1st Prize.** Saltaire Rose Show, for Herbaceous Group. **Gold Medal.** North of England Horticultural Society, for Herbaceous Flower Border. **1st Prize.** Leeds, for Herbaceous Flowers. **1st Prize.** Southport, for Collection of Gladioli. **1st Prize and Gold Medal.** Huddersfield, for Hardy Flowers.

**Wm. ARTINDALE & SON,  
NETHER GREEN, SHEFFIELD**

Please mention THE GARDEN when writing.

**HOME-BREWED WINES AND UNFERMENTED BEVERAGES** for all seasons of the year. By ANNE AMATEUR. A helpful booklet containing also recipes for invalid drinks, and published at 9d., post free 11d., at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, W.C.2.

Crown 4to. Edition de Luxe, limited to 200 copies for sale, £3 3s. net. Ordinary Edition, 25s. net.

## FLOWERS

### A Garden Note Book

With Suggestions for Growing the Choicest Kinds

BY  
**The Rt. Hon. Sir Herbert Maxwell, Bart.**

With Twelve Coloured Plates from drawings by the Author.

"A book which, with its twelve colour plates, is cheap at any price, because of the practical advice it offers, in terms both of humour and of vision. The kind of book to keep by the bedside, or close at hand by the study table; the smell of the soil is in it. . . . He tells the tale with charm. I have many garden books, but this one will at once take its place among the few that matter. . . ."—*Marion Cran* in "The Queen."

Glasgow: **MacLEHOSE, JACKSON & CO.,**  
Publishers to the University.  
London: **SIMPKIN, HAMILTON & CO., LTD.**

Please mention THE GARDEN when writing.

## NOW IS THE OPPORTUNITY

To restock your GARDENS,  
OR HARDY, ESTATE NURSERIES.

## Great Two Days' Sale

ABOUT 1,100 LOTS BY AUCTION AT

**Pitt Corner Nursery, No. 2, January 28th**  
**West Hill Nursery, No. 1, January 29th**

**NEW CHINESE and CHOICE SHRUBS,**  
etc. **FOREST TREES. LARGE SPECIMEN CONIFERS and EVERGREENS** up to 15 ft. **LARGE SPECIMEN ORNAMENTAL TREES** up to 35 ft. Flowering Shrubs. 6,000 Hedging Plants. 12,000 Fruit Trees and Fruit Bushes, Figs, etc. 2,000 Rose Trees.

Write at once for catalogues post free on application.

**HILLIER & SONS,**  
**West Hill Nursery, WINCHESTER.**  
Severe weather will not prevent sale.

## HARDY ORCHIDS

Cypripedium acaule, 3/6 each; Cypripedium spectabile 3/6 each, strong clumps, 5/- and 7/6 each, a few extra large, 10/6 each; Orchis foliosa (The Madeira Orchid) 2/- and 2/6 each, 18/- and 24/- per dozen

**T. SMITH, Daisy Hill Nursery, Newry, Co. Down**

## BRITISH ROSES

at 10d. each; 9/- per dozen.

**NEW GLADIOLI.**

**PRIMULINUS and GIANTS.**

**FRUIT TREES and BUSHES.**

Order Now for First Choice.

**ILLUSTRATED CATALOGUE FREE.**

**ALFRED EDWARDS, F.R.H.S., Fordham, ELY**

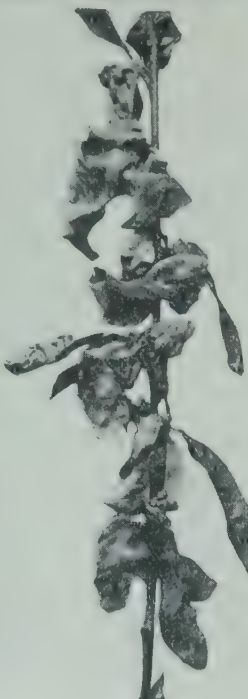
## AUSTIN'S SCOTCH SEED POTATOES

Edward, Majestic, and Tinwald Perfection. Catalogues free.

**AUSTIN & McASLAN**

The Premier Scottish Seedsmen since 1717

**89, Mitchell Street, GLASGOW, C.1**



### NOTICE.

## LEAF CURL

of Peaches and Nectarines  
can be

PREVENTED BY

**"MEDELA"**

### SPRAY NOW

before the buds burst.  
1 part to 16 soft water.

**CARRIAGE PAID PRICES:**  
½ gal. - 4/6 | 2 gal. - 11/6  
1 gal. - 7/- | 5 gal. - 25/6

Obtainable only from—

**GEO. BUNYARD & Co., Ltd.**  
**ROYAL NURSERIES,**  
**MAIDSTONE.**

## DANIELS' GARDEN GUIDE

OUR Large Illustrated Guide—120 large pages—for 1925 is at the service of all gardening enthusiasts free of any cost. It is compiled afresh each year, and we have this year added a calendar of gardening operations for each month.

It is invaluable to every one who gardens, and you should at once secure your copy, with full lists of the best Vegetable and Flower Seeds, Seed Potatoes, Gladioli, Roses, Fruit Trees and Bushes, Perennials, &c. **WRITE TO-DAY FOR YOUR COPY.**

## DANIELS BROS. LTD

**Seed Growers,**  
By Appointment to H.M. The King **NORWICH**

## FRUIT TREES, ROSES ORNAMENTAL SHRUBS

ETC.

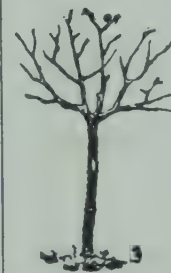
GUARANTEED ENGLISH GROWN

"Buy the Best,  
They Stand the Test."

Descriptive Catalogue FREE on application

**THE FOREST AND  
ORCHARD NURSERIES, LTD.**

MULLBURY HEATH · FALFIELD · C



## CRAZY PAVING

Lumps for Rockeries, etc.  
4 Ton Lots and upwards.

**HENRY L. COOPER & Co.,** 29, Mark Lane, LONDON, E.C.3.

## ROBERT VEITCH & SON

### Seed Catalogue for 1925

contains all the leading kinds of Vegetable and Flower Seeds, eight pages of Novelties and Specialities, mostly of their own raising; and nearly one hundred varieties of beautiful Sweet Peas.

**R. VEITCH & SON** are also Specialists in Hardy Trees and Shrubs, Choice and Rare Plants, Fruit Trees, etc.

CATALOGUES FREE ON APPLICATION.

Royal Nurseries and Seed Warehouse, Exeter

## BENTLEY'S

**Wholesale Manufacturer**

OF

over 100 proprietary specialities

**FOR THE GARDEN**

Write for detailed illustrated catalogue to:

**JOSEPH BENTLEY**

LIMITED,

**Chemical Works,**  
**Barrow-on-Humber, HULL**

Please mention THE GARDEN when writing.



## Beautiful Garden Books

**SECRETS OF MANY GARDENS**  
By Mrs. PHILIP MARTINEAU  
7 full page illustrations. 12s. 6d. net

**THE HERBACEOUS GARDEN**  
By Mrs. PHILIP MARTINEAU  
Fourth Enlarged Edition. 32 plates. 12s. 6d. net

**ROCK GARDENS**  
By LEWIS MEREDITH  
Third Edition. Many illustrations. 10s. 6d. net

**ONE GARDEN:**  
**AN INTIMATE CHRONICLE OF ITS MAKING**  
By D. H. MOUTRAY READ  
Profusely illustrated. 12s. 6d. net

**TREE WOUNDS AND DISEASES: THEIR PREVENTION AND TREATMENT**  
By A. D. WEBSTER  
Profusely illustrated. 7s. 6d. net

**EVOLUTION of PLANTS**  
By Dr. D. H. SCOTT  
Fully illustrated. 2s. 6d. net

FOR FULL GARDEN CATALOGUE WRITE TO:  
**WILLIAMS & NORGATE, LTD.**  
4, HENRIETTA STREET, LONDON, W.C.2

Please mention THE GARDEN when writing.



**WEBBS' EMPEROR TOMATO**  
grown with Webbs' Special Tomato Manure.  
Seed 1/- and 1/6 per packet.

## IF YOU WANT THE BEST of Everything for Garden & Lawn

VEGETABLE & FLOWER SEEDS, POTATOES, BULBS,  
LAWN SEEDS, FERTILISERS, TURF PREPARATION,

Send for a copy of

### WEBBS' GARDEN CATALOGUE

Beautifully Illustrated.

Free on request.



### A FEW 'GOOD THINGS'

Webbs' Early Favourite Pea .. .. 2/- pint.  
Webbs' Senator Pea .. .. 2/- pint.  
Webbs' Gigantic Windsor B. Bean .. 1/6 pint.  
Webbs' Seld. Ailsa Craig Onion 1/- & 2/6 pkt.  
Webbs' Forcing Gem Lettuce 6d. & 1/- pkt.  
Webbs' Ever-bearing Cucumber .. 1/6 pkt.  
Webbs' Colonist Potato (Early) .. 6/- peck  
Webbs' Standard Carrot .. 6d. pkt., 1/3 oz.  
Webbs' Marrowfat Parsnip 6d. pkt., 10d. oz.  
Webbs' Giant Lavender Sweet Pea 8d. pkt.  
Webbs' Perfection Pink Aster 8d. & 1/- pkt.  
Webbs' Scarlet Queen Antirrhinum 1/- pkt.

**WEBB & SONS, Ltd.,** The King's Seedsmen  
STOURBRIDGE

## SEEDS

IF YOU WANT

## REALLY GOOD SEEDS

AT MODERATE PRICES

SEND TO

**ROBERT SYDENHAM LIMITED**

10, TENBY STREET, BIRMINGHAM

No one will serve you better.

**SWEET PEAS A SPECIALITY**

**THEIR UNIQUE LISTS**

contain only the Best

**VEGETABLES, FLOWERS AND**

**BULBS WORTH GROWING**

Post free on application

**ROBERT SYDENHAM, LIMITED**

Please mention THE GARDEN when writing.

## BOLTONS' SWEET PEAS

The Leading House for

AWARDED 167 GOLD MEDALS.

ENGLISH SEED ONLY.

GROWN ON OUR FARMS.

Our Stocks are without doubt the finest in the world, due to the fact that we are the ONLY FIRM who specialise and devote all our time to raising and improving stocks of Sweet Peas.

SEND FOR OUR NOVELTIES FOR 1925.

The following are recommended with every confidence.

— All are quite distinct and extra vigorous growers. —

### ANGELE.

Award of Merit, York.  
The most striking and fascinating feature of the flower is its colour, easy indeed to appreciate, but difficult to describe. The wings strike a new tone in blue-mauve. The standards scintillate with a unique suffusion of pink-mauve, rendered more striking by basal flush of the wing colour.  
Per packet — 10 SEEDS — 1/-

### EMPIRE.

A large bright rose-pink; makes a telling bunch for exhibition.  
Per packet — 10 SEEDS — 1/-

### SUPREME.

Award of Merit, Manchester.  
A clear pink of uniform colouring.  
Per packet — 10 SEEDS — 1/-

### MAMMOTH.

Award of Merit N.S.P.S.; Award of Merit, York; Award of Merit, Manchester.  
A bright fiery orange-scarlet; a great advance in this colour.  
Per packet — 10 SEEDS — 1/-

### WEMBLEY.

First-class Certificate N.S.P.S., and Gold Medal for Best Novelty of the Year.  
Award of Merit, York.  
Undoubtedly the largest and best pure lavender Sweet Pea ever introduced. Equally good for exhibition or garden decoration.  
Per packet — 10 SEEDS — 1/-

ALL ORDERS SENT BY RETURN POST. NO WAITING.

ILLUSTRATED CATALOGUE POST FREE ON APPLICATION.

**ROBERT BOLTON & SON,** SWEET PEA SPECIALISTS,  
BIRDBROOK, Nr. HALSTEAD, ESSEX.

Please mention THE GARDEN when writing.



## BOOK REVIEWS

THE present volume, "Garden Improvement," by T. Geoffrey W. Henslow, M.A., 15s. net (Dean and Son, Debrett House, London), is the third of a series of gardening manuals, two of which have already been published. The present volume can probably be best described as an A.B.C. of gardening operations which should be carried out to improve one's garden, and the subject is treated on similar lines to its two predecessors. It is wide in its scope, dealing with all phases and branches of gardening; and the subject matter is presented in a style which one regards as peculiarly the author's own. The interest of the reader is never allowed to flag, the manner being almost conversational, while the facts and information are presented in simple direct language. The photographic illustrations, which are numerous throughout the pages, are not of an exceedingly high standard of excellence, but they serve their purpose. Numerous advertisements are to be found, along with many references to advertisers, throughout the work—a unique feature in a book of this description. We feel sure that much useful information will be gleaned from its pages and that it will prove of real assistance to all gardeners, be they professional or amateur, as many practical hints and much expert counsel and advice are given. G. C. T.

A BOOK came in for review the other day. It was not a large book; it was not handsome as books go, but the title attracted me and I have read it through. There is not a word about gardening in it from beginning to end. The only mention of the word garden is about an invasion of sheep—and yet the publisher showed wonderful perspicacity in

sending this book to a gardening paper for review, for it is essentially a book on the country. It is called "The Cottage by the Common." It is by Mrs. O. A. Merritt Hawkes, and it is published by Williams and Norgate for 7s. 6d. It consists of short essays and stories written around the cottage on the common.

To many the joys of the country consist of a dash into the open air for a game of golf, to look at a garden, or for purposes of sport, with another dash at the end of it back to the comforts and fleshpots of a city, but to Mrs. Hawkes the country consists not of flora to look at and fauna to hunt, but her cottage, her cottager neighbours, the common, the local sandpit, the pools in the neighbourhood and all the multitude of weighty affairs to which a townsman is blind. I have rarely read a book of which the author is so engrossed by her immediate surroundings, and in some of the chapters, particularly towards the end of the book, she writes with a particular charm. Here is a sample: "The worn mother, with her shapeless body and dragged clothes, goes into the garden. Her dead-looking hair is screwed up into a shaggy knot. She looks a clod. She bends over to look at the snowdrop. A silence clothes her. Even the town-dweller, who judges so much by externals, can see she is *not* a clod. 'The winter will be over soon. I'll be glad to dry the washing out o' doors.'

"When no one is about she goes out alone to see the flower. She gently picks up its hanging head with her finger—a finger roughened by water and browned by the peeling of thousands of potatoes."

In some of the chapters, notably "The Wayfarer" and "The Flute-player," the writing is as simple and direct as that of

Fielding Hall. Mrs. Hawkes has so whetted my appetite that I hope she gives us more of her store of knowledge. E. H. M. C.

## CATALOGUES RECEIVED.

One of the many garden seed lists which met with much approval last year was that of Messrs. McHattie and Co. of Chester, and they are to be congratulated on the publication of their list for 1925. This is a new edition with coloured plates and numerous half-tone reproductions. There is a wide variety and selection of both flower and vegetable seeds, the latter being guaranteed to reach the necessary percentage of purity and germination under the Seeds Act (1920). We would like to draw our readers' attention to the section of the catalogue devoted to Garden Sundries, such as tools, implements, etc. The prices quoted are reasonable and show a tendency to return to the pre-war level. It is an excellently produced little manual running to eighty-four pages.

Among sweet pea enthusiasts the name of Unwins has become almost a household word. This firm has specialised in the raising of sweet pea crops and for 1925 they claim some real advances in the respective colour sections. These and other novelties of their own raising can be found in their excellent catalogue which has just been published. Brief cultural notes are contained in its pages and the amateur should find it of great assistance. The address of Messrs. W. T. Unwin is Histon, Cambs.

Messrs. Andrew Ireland and Hitchcock. Garden Seeds, Flowers and Vegetables for 1925.

SPRAYERS  
AT  
HALF - PRICE

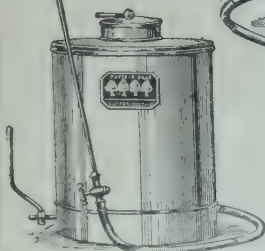
Being end of show season, we have a few of our well-known **Four Oaks Gold Medal Knapsack Sprayers** to offer at half price. They are guaranteed to be in perfect working order, but soiled through use at shows. For all practical purposes they are as good as new machines.



No. 101.  
**FOUR OAKS  
KNAPSACK  
SPRAYER  
EXTERNAL  
PUMP**

3½ gals.  
Copper  
container

**FOUR OAKS  
KNAPSACK  
SPRAYER.  
No. 106.**



The original type of Knapsack Sprayer, with rubber diaphragm pump and rubber valves. £2 10 0  
3½ gals. copper container

Above prices are for cash with order only, carriage paid, from the Sole Manufacturers:—

**THE FOUR OAKS SPRAYING MACHINE CO.**  
**FOUR OAKS WORKS, Sutton Coldfield, BIRMINGHAM**

Please mention THE GARDEN when writing.

## BEDALE ROSES, FRUITS AND HARDY PLANTS

CATALOGUE FREE ON REQUEST

## GIBSON'S NEW HYBRID LUPINS

**RUBY KING**, finest purple, 9d., 8/- doz. **ROSY MORN**, deep red with purple glow, 9d., 8/- doz. **EXQUISITE**, lavender, rose and white, sweetly blended, 1/-, 10/- doz. **EUGENE**, deep rosy lavender, 1/-, 10/- doz. **WISTARIA**, lovely Wistaria colour, 1/6, 15/- doz. **RADIANCE** (new), pale amber to buff apricot, shaded deep warm orange, 5/-, 55/- doz.

40,000 **GRAND ROSES**, many averaging 1/3 and 1/6 each. 12 grand varieties, our selection, for 12/-. All carriage paid for cash with order

**G. GIBSON & CO., LEEMING BAR, BEDALE**

SOW NOW to bloom in July and August  
**BLACKMORE & LANGDON'S**

World renowned **BEGONIA SEEDS** (73 Gold Medals)

DOUBLE	
None can equal this for quality, size, and lovely form and colours of flowers . . . . .	per packet 2/6 & 5/-
<b>FIMBRIATA PLENA</b>	
Double frilled, very pretty . . . . .	2/6 & 5/-
<b>SINGLE</b>	
Of wonderful size and form . . . . .	1/-, 2/6 & 5/-
<b>FRILLED SINGLE</b>	
A beautiful selection . . . . .	1/-, 2/6 & 5/-
<b>CRESTED SINGLE</b>	
Very fascinating . . . . .	1/-, 2/6 & 5/-
<b>CRISPA MARGINATA</b>	
Delightful novelty, frilled single picotee . . . . .	2/6
<b>HANGING BASKET</b>	
A grand novelty, very graceful . . . . .	1/6, 2/6 & 5/-
<b>GLOXINIA</b>	
Seed, mixed in most beautiful selection of colour . . . . .	1/6, 2/6 & 5/-

For Prices of Tubers of above and other Specialities, write for Free Catalogue and mention this Magazine.

**BATH.**

## NOW IS THE OPPORTUNITY

. . . To restock your GARDENS, . . .  
ORCHARDS, ESTATE NURSERIES.

**Great Two  
Days' Sale**

ABOUT 1,100 LOTS BY AUCTION AT

**Pitt Corner Nursery, No. 2, January 28th**

**West Hill Nursery, No. 1, January 29th**

**NEW CHINESE and CHOICE SHRUBS, etc. FOREST TREES. LARGE SPECIMEN CONIFERS and EVERGREENS up to 15 ft. LARGE SPECIMEN ORNAMENTAL TREES up to 35 ft. Flowering Shrubs. 6,000 Hedging Plants. 12,000 Fruit Trees and Fruit Bushes, Figs, etc. 2,000 Rose Trees.**

Write at once for catalogues post free on application

**HILLIER & SONS,**

**West Hill Nursery, WINCHESTER**

Severe weather will not prevent sale.



# THE GARDEN.

**TERER'S GOLD MEDAL RHODODEN-**  
NS, Azaleas and Roses, rare Hardy Shrubs, Fruit Trees,  
es, etc., Alpine and Perennial Plants, Vegetable and Flower  
Scotch-grown Seed Potatoes. Catalogue free.—JOHN  
TERER, SONS & CRISP, LIMITED, Twyford, Berks; Bagshot,  
y; and London.

**KELEY'S PATENTED HOP MANURE.**  
e original and only substitute for Stable Manure. See  
t. on back cover.

**. DUNCAN TUCKER & SONS, LTD.,**  
nce Road, South Tottenham, N.15.—Conservatories,  
r Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**DS' BATHS, GARDEN VASES, SUN-**  
S, NESTING BOXES. Catalogue (No. 4) free.—  
TON, 60, Buckingham Palace Road, S.W.

**ERS' FRUIT TREES, ROSES, VINES,**  
Oranges and Orchard House Trees are of first-class quality  
large and select stock is always on view. Inspection  
d. Catalogue post free on application.—THOS. RIVERS  
SON, LIMITED, The Nurseries, Sawbridgeworth, Herts.

**VINES FROM THE FINEST COLLEC-**  
in the West of England, 150,000 pot-grown plants,  
ing many rarities. Descriptive Catalogue free. Hardy  
a speciality.—BOWELL AND SKARRATT, The Alpine  
es, Cheltenham.

**ORANGEA MAD! A delightful sensation**  
by growing the lovely new varieties; send for H. J. JONES'  
gue of Gold Medal Hydrangeas, Chrysanthemums, Mont-  
s, Michaelmas Daisies, Hardy Phlox, etc., free on applica-  
Also H. J. JONES' Chrysanthemum Guide, 17th edition,  
ree, 1/3.—Ryecroft Nurseries, Lewisham.

**NED GARDEN NETTING, small mesh,**  
by 1yd., 2s.; 25yds. by 2yds., 4s.; 40yds. by 1yd.,  
; 40yds. by 2yds., 6s. 6d.; 40yds. by 3yds., 9s. 9d.,  
e paid. Compare our netting with others. Lists now  
—GALLOP, Net Manufacturer, Hastings. Telephone: 352.

**UBS are becoming more and more**  
shion in gardening. "Shrubs for Amateurs," Mr. W. J.  
new book, is the best on the subject at a reasonable  
5/- net. Published at the Offices of "COUNTRY LIFE,"  
ED, 20, Tavistock Street, Covent Garden, W.C.2.

**TCH SEED POTATOES, May Queen,**  
of York, Eclipse, Midlothian Early, Epicure, Di Vernon,  
hill, Dargil Early, Great Scot, Arran Comrade, Ally, Abun-  
Immune Ashleaf, Arran Chief, Golden Wonder, King  
d, K. of K., Majestic, Rhoderick Dhu, Bishop, etc. Prices  
ne, cwt. and ton on application. List of Vegetables and  
s free.—TILLIE, WHYTE & Co., 12, Melbourne Place,  
IV. Bridge, Edinburgh. Established 1837.

**LLS' CATALOGUE OF CHRYSANTHE-**  
now ready, and will be sent post free on application.—  
ELLS & Co., Mersham, Surrey.

**VINES, ROCK PLANTS ONLY.**—Descrip-  
catalogue 600 varieties, free.—TERRYLEE, F.R.H.S.,  
rden Road, Stechford, Birmingham.

**NT PESTS AND PARASITES.**—A useful  
t on garden troubles by HORACE J. WRIGHT is to be  
ed from the Offices of "COUNTRY LIFE," LIMITED, 20,  
ock Street, W.C.2; 11d. post free.

**YSANTHEMUMS. ROOTED CUT-**  
s. Japs., 5/- doz.; decorative, single and early-flowering,  
z., 5/- 2 doz. Cash with order. Post free. Ready  
ry onwards. List on application.—SHEPPARDS, Shaw-  
Nursery, Hollywood, Birmingham.

**BARR'S FLOWER & VEGETABLE SEEDS**  
of finest Selected Strains and Tested Growth. At the R.H.S.  
Wisley Trials our Strains of Vegetable Seeds have received  
exceptional recognition for high quality. Gold Medal awarded  
for Annuals at the Great International Flower Show, Antwerp,  
1920. Descriptive Catalogue free.—BARR & SONS, 11, 12 & 13,  
King Street, Covent Garden, London, W.C.2.

**IRON AND WIRE FENCING FOR GAR-**  
DENS.—Ornamental Iron and Wire work of every description.  
Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue  
G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel  
Railing. Catalogue G. 86. Poultry Fencing. Catalogue G.  
70. Ask for separate lists.—BOULTON AND PAUL, LIMITED,  
Norwich.

**TOMATO CULTIVATION: UNDER GLASS**  
AND OUTDOORS. By R. V. GIFFARD WOOLLEY. A practical  
booklet, 9d. net, by post 11d. Published at the Offices of  
"COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent  
Garden, W.C.2.

**ALL PROFESSIONAL GARDENERS should**  
become Members of the British Gardeners' Association. Full  
particulars (stamp).—JOHN WEATHERS, 1, Park View, Isleworth.

**SEWAGE DISPOSAL FOR COUNTRY**  
HOUSES.—No emptying of cesspools; a perfect fertiliser;  
no solids; no open filters; perfectly automatic; everything  
underground. State particulars.—WILLIAM BEATTIE, 8, Lower  
Grosvenor Place, Westminster.

**GARDEN DESIGN is best dealt with in**  
"Planning and Planting of Little Gardens," by G. DILLISTONE,  
6/-; by post, 6/6. Published at the Offices of "COUNTRY LIFE,"  
LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**LAXTON'S NEW SEED CATALOGUE, con-**  
taining Novelties for 1925. New Pea "Bedford Champion"  
and "Laxton's Progress," post free on application. Fruit  
Tree Catalogue and Cultural Hints can also be sent, post free,  
on request.—LAXTON BROTHERS, Nurserymen, Bedford.

**YORK STONE PAVINGS, crazy or rect-**  
angular, rustic copings, steps, roughly squared or random  
shaped, flat bedded wallstones, garden edging, rockery, etc.—  
SAMUEL JOHNSON AND SON, Quarry Owners, Mirfield, Yorkshire

**IPSWICH RARE SEEDS.** Catalogue de-  
scribing nearly 3,000 kinds now ready. Free on application  
to THOMPSON AND MORGAN, London Road, Ipswich.

**CHOICE NEW CHRYSANTHEMUMS.**—Our  
Catalogue of nearly 900 varieties, including Grand Novelties for  
1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready.  
Post free on application.—J. W. COLE AND SON, Chrysanthemum  
Specialists, Peterborough.

**POTATOES: HOW TO GET THE BEST**  
CROPS. A booklet that is full of useful information. By  
EDWIN BECKETT, V.M.H., 9d. net, by post 11d. Published  
at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock  
Street, Covent Garden, W.C.2.

**MANURES.**—The most complete little book  
on the subject is "The Manual of Manures," by H. VENDELMANS.  
4/5; by post, 4/9. Published at the Offices of "COUNTRY  
LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**THE CULTURE OF CHRYSANTHEMUMS.**  
By W. WELLS, 2/6 net; cloth, 3/6 net; by post 6d. extra.  
—Published at the Offices of "COUNTRY LIFE," LIMITED,  
20, Tavistock Street, Covent Garden, W.C.2.

**CANADIAN AND AMERICAN GLADIOLI.**—  
The best of the standard varieties and novelties.—J. W. CROW,  
Simcoe, Ontario, Canada.

**SUTTON'S SEEDS.**  
A wonderful record in 1924, when no fewer than 34 GOLD MEDALS  
as well as numerous other awards were gained by SUTTON'S  
SEEDS at the leading Exhibitions throughout the country.  
Sutton's Garden Seed Catalogues for 1925, free on application.  
SUTTON AND SONS, THE KING'S SEEDSMEN, READING.

**DOBBIE'S 1925 CATALOGUE AND GUIDE,**  
136 pages, 194 illustrations. Free to all readers. Please mention  
THE GARDEN when writing.—DOBBIE & Co., LTD., Edinburgh.

**BATH'S SELECT SEEDS AND PLANTS.**—  
New Illustrated Catalogue of choice Vegetable and Flower Seeds  
and Plants is now ready, and will be sent post free on applications  
—(Dept. E), R. H. BATH, LTD., Floral Farms, Wisbech.

**CHEAP GOVERNMENT WIRE !!! Great**  
for training fruit trees, peas, beans, hops, arches, greenhouses,  
tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-  
stranded and waterproof covered. Several thicknesses from 19/6  
per mile (full 1,760 yards). Postcard to-day for free samples and  
list of 300 bargains.—GREEN'S GOVERNMENT STORES, 69, Albert  
Street, Lytham.

**LOAM.**—Fibrous Yellow Turf Loam. Illus-  
trated Catalogue Free.—A. B. JOHNSTON, New Park, Cranleigh,  
Surrey.

**ALPINES AND DWARF CONIFERS for**  
Rock Gardens. 50,000 pot-grown Alpines in stock; over 300  
varieties. 2 dozen collection, 8 kinds, 15/- carriage paid. Lists  
free.—HODSONS, Castlegate, Nottingham.

**BARNARDS, LTD., NORWICH, for Garden**  
Requisites of all kinds.

**FIDLER'S NEW ILLUSTRATED GARDEN**  
SEED GUIDE AND CATALOGUE FOR 1925 IS NOW  
READY, and a copy will be sent post free to any address on  
receipt of a post card.—Write at once to FIDLER & SONS, Royal  
Berkshire Seed Stores, Reading.

**108 GLADIOLI for 8s. 9d. post paid.**—The  
most dazzlingly brilliant flowers on earth, with spikes of  
blooms 18ins. long; 12 each of 9 kinds (108 bulbs), all separately  
packed and named, for 8s. 9d., post paid; half lot, 4s. 9d.,  
post paid (cultural instructions and beautifully illustrated  
Flower and Vegetable Catalogues included).—J. KAY AND Co.,  
Goodmayes Road, Goodmayes, Essex.

**BEGONIAS AND GLOXINIAS.**—Kay's prize  
strain with blooms often measuring 8ins. across; a collection  
of 12 Single and 12 Double Begonias, also 6 Gloxinias—all  
separately packed and named, with cultural instructions and  
illustrated catalogues, for 6s. 3d., post paid; half lot, 3s. 6d.,  
post paid.—J. KAY AND Co., Goodmayes Road, Goodmayes,  
Essex.

**SWEET PEAS AND HOW TO EXCEL**  
WITH THEM. By HORACE WRIGHT, 9d. net, by post 11d.  
Published at the Offices of "COUNTRY LIFE," LIMITED, 20,  
Tavistock Street, Covent Garden, W.C.2.

**STORING VEGETABLES AND FRUITS,**  
with chapters on "Drying in the Oven and by the Kitchen  
Fire." By HERBERT COWLEY. 9d. net, by post 11d.—Pub-  
lished at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock  
Street, Covent Garden, W.C.2.

**LABELS TO LAST—AT LAST!**—You write  
by any nail point, on prepared (Patented) Metal, yet it cannot  
fade. Severely tested for years on inventor's Nurseries. The  
R.H.S., after long trial, award H.C. List of shapes free.  
Samples 2d.—WEBSTERS PATENTS Co., Witheridge, Devon.

**GREENHOUSE PAINTING AND GLAZING.**  
—"Vitrolite," superior to White Lead Paint, 18/6 per gallon,  
cans extra. "Plastine," the Imperishable Putty, 32/- per cwt,  
kegs extra; 7lb. tins, 4/- post free; 14lb. tins, 5/6 each, carriage  
extra, tins free.—Full particulars from W. CARSON & SONS  
Grove Works, Rattery, S.W.11.



## CARTERS TESTED SEEDS

BREAK all RECORDS with

GIANT STRIDE  
PEA

ORDER

NOW

3/6 per Pint

6/- per Quart

POST  
FREE.The Largest  
PODDEDDWARF PEA IN THE  
WORLD.

HEIGHT 2 FEET.

ILLUSTRATED CATALOGUE

POST FREE ON APPLICATION.

James Carter & Co. SEEDSMEN TO  
H.M. THE KING.  
RAYNES PARK, LONDON, S.W., 20.

Please mention THE GARDEN when writing.

Notes from Maidstone.

## FIGS.

These delicious fruits are one of the best subjects for cold Greenhouses or for outdoor culture in the South. Those best suited for outdoors are marked \* and give best results when planted in poor soil against a south wall. Brown Turkey\*, Brunswick\*, White Ischia\*, Bourjasotte Grise, Negro Largo, White Marseilles. Young pot trees to fruit this year, bush, 5/- fan-trained, 7/6. We also have a few larger trees of these and other varieties, 10/6 to 21/- each.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Maidstone.

Established 1796.

Please mention THE GARDEN when writing.

Toogood's  
Seeds

THAT GARDEN OF YOURS can be made as lovely and as profitable as the one you have so often admired if you sow only plainly GUARANTEED GARDEN SEEDS; and they cost no more to buy. Send a post-card to-day for our 160-page beautifully illustrated

FREE GUIDE TO  
GUARANTEED  
GARDEN SEEDS.

Every packet ordered thence MUST grow for you and please you or you will get it replaced freely. Address us personally:

TOOGOOD & SONS, Ltd.,  
Seedsmen to H.M. the King, SOUTHAMPTON.

Please mention THE GARDEN when writing.

Sutton's  
Seeds

A CHAMPION ONION.

SUTTON'S SELECTED AILSA CRAIG.

First Prize for Spring-Sown Onions

First Prize for Autumn-Sown Onions

IN OPEN CLASSES.

SHREWSBURY FLORAL FETE, 1924

Unrivalled for perfection of form, combined  
with size and weight.

Per Packet, 2 6 and 3 6

SUTTON'S GARDEN SEED CATALOGUE for 1925  
will be forwarded on application. Post Free.

SUTTON &amp; SONS, THE KING'S SEEDSMEN, READING.





VOL. LXXXIX.—No. 2775.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d.  
Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2.

Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
Entered as Second-class Matter at the New York, N.Y., Post Office.

JANUARY 24, 1925

## MOISTURE AND PLANTING

SO much has been said, either aloud or under the breath, about the past season that there is little use recapitulating all its eccentricities. In some ways, however, it has been a most remarkable season. The actual rainfall in a few parts of the country has not been so large in bulk as in 1923, and throughout the country it has been patchy, but whatever the rain gauge may say, there is no doubt that the universal complaint is that it was the wettest rain that has ever fallen. This is, of course, caused in great measure by the number of days on which rain fell, but there is a further reason in many areas, and that is that the subsoil is not suited to carry off so much water in two consecutive wet years. Probably many old drains, which may have been hidden for years and yet have worked efficiently, have become choked and so helped to make the ground even more water logged.

It is to be hoped that some time during the next two months we may have sufficient hard weather to break up the surface, and it is advisable at present to dig and trench every available piece of ground so that as much of the surface may be exposed to the air as possible. In many gardens, where the soil is clay or heavy loam, the surface is so puddled that a thorough loosening of the soil is imperative, otherwise another wet year might do irreparable damage. Another season such as 1923 and 1924 coming on top of a water-logged surface would make aeration impossible, while the surface would be baked like a brick if a drought came with hot sunshine and drying winds. It is natural that gardens with a heavy soil and subsoil have suffered the most, while those with a light surface and gravel subsoil have actually benefited by the damp seasons of 1923 and 1924.

The plants which have undoubtedly been helped by successive rainy days are trees and shrubs; they have never had such a time in their lives. But even they can have too much of a good thing and in some cases, usually in heavy soil, they are flagging and appear thoroughly unhappy; the reason for this is that the soil in the hole was tramped in before the plant was planted, with the result that a basin was formed from which the water could not escape, with accompanying stagnation to the plant. If the plant is too big to be conveniently lifted and replanted after breaking up the soil, the remedy is to shove a crowbar deep into the ground so as to break the basin and allow drainage; this may be slow owing to the sodden condition of the ground, but is better than nothing.

It is a curious fact that many people who may be excellent gardeners often have two bad habits: one, as I say, is tramping in the earth in a hole made for planting; the other is of planting too deep. Too shallow planting is infinitely less obnoxious to almost all trees and shrubs than the opposite. A plant raises a stem in order that it may be exposed to the air and the elements and even if a small portion of this stem be covered it may disarrange its interior economy with the result that the plant shows its displeasure. There have been numerous cases of disease attacking a plant solely because it has been covered by soil above the collar. I cannot impress the error of too deep planting too strongly upon my readers, whether it be in fruit trees, ornamental trees, conifers, or shrubs. Naturally there are a few exceptions, as in the case of willows, but they only prove the rule.

It is also a mistake to plant when the ground is too moist, for the necessary tramping in of the soil around the plant puddles the earth and turns it into an impenetrable mass. In any case it should be seen that roots are carefully spread out in something approaching their original position. If the original soil was clay or heavy loam and sticks to the roots, as much of this should be removed as possible, of course taking care not to damage the roots, for travelling or transplanting has probably hardened the soil, so that it has formed a cake around the roots, which are unable to function properly and make their way through the hard mass.

Planting is a serious business, if your plants are to thrive from the moment they are planted, and in wet seasons a difficult one. It is not merely a question of digging a hole and shoving in the plant. Soil and general conditions must be examined with a critical eye. Successful planting requires thought and patience, but this is not done in vain.

E. H. M. C.

### AMONG OTHER ARTICLES IN OUR NEXT ISSUE WILL BE:

SUCCESS WITH SWEET PEAS, by C. W. J. Unwin.

THE RAISING OF BEDDING PLANTS.

WINTER WORK AND PLANTING, by Edwin Beckett.

HARDY FERNS FOR TOWN GARDENS, by A. J. Macself.



# GLOXINIAS

THERE ARE FEW FLOWERS WHICH POSSESS SUCH BRILLIANT COLOURING AS THE GLOXINIA. AS THE AUTHOR POINTS OUT IT SHARES THIS WITH THE BEGONIA. THESE TWO GENERA HAVE THE PECULIARITY THAT THEIR COLOURS ARE NEVER SO STARTLING AS TO CLASH WITH OTHER FLOWERS IN THE GREENHOUSE.

**H**AD one to name the most brilliant flower of the indoor garden, the voting would probably be fairly even between the gloxinia and the begonia. It is the former, however, that really deserves the highest place, not because of its superiority, but because of its wider range. Grand as the begonia is we have but to think of those gorgeously rich velvety blues and purples; those vivid scarlets and crimsons, running into shades so deep as to be nearly black; those wonderful sunset pinks and mauves that are so prominent among the gloxinias—to realise that they are indeed the regal queens of the greenhouse.

Considering their marvellous wealth of beauty and variety, few plants are easier to grow, and this is especially true of that aspect with which we are concerned to-day—raising from seed. Not only is this a simple matter, but he who sows now is sure of an early reward, for, about six months from the date of sowing, good plants, well furnished with bloom, result. Another splendid feature is the high quality of the flowers, for one finds very few that need be discarded as not up to standard.

One matter is absolutely essential to success, and that is a steady and sufficient temperature—60° to 70° being the minimum under which culture is possible. The seeds are very small, and thus precautions have to be taken to prevent their becoming too deeply covered by soil both before and during the process of germination. Prepare a clean seed pan by well crocking, first with one large crock over the drainage hole and then a layer of smaller pieces over this. Drainage is of prime importance, and particular care should be given to this point. A compost, consisting mainly of fibrous loam with a very moderate amount of leaf-mould and peat, should be thoroughly mixed together, with sufficient coarse sand to make the whole feel gritty. This should be sifted so as to divide it into two heaps. Place a thick layer of the coarser part over the drainage and then surface to within  $\frac{1}{2}$  in. of the rim with

the finest earth. Make this level and press moderately firm, then water lightly with a fine-rosed can and set aside for an hour to drain before sowing. The seed is more evenly distributed by mixing with an equal bulk of the finest sand, and the importance of even and thin distribution is only recognised when the time comes to prick off the young seedlings. No covering of soil of any kind should be attempted; simply sprinkle the seeds and sand on the surface and then cover the pan with a sheet of brown paper and a pane of glass.

Stand this pan in a steady temperature of 65° to 75° and see that the soil is kept evenly damp without being swamped. It is most important that the soil should never become dry, for the tiny seeds produce equally tiny plantlets, and these, if dry, even for an hour, will be shrivelled up. Of course, it is impracticable to apply water in the usual way, and the best method is partly to immerse the pan in tepid water until this has made its way upwards through the soil to the surface and so thoroughly moisten the whole. Keep the brown paper and glass over the pan until the seeds have germinated, then dispense with the paper so as to admit light. Care must be taken that bright sunlight does not shine directly upon them; but, bar this, full light is a great asset in obtaining healthy seedlings. A steady temperature, regular waterings with tepid water and the admission of air by gradually withdrawing the pane of glass encourage good growth.

It is better not to

disturb the small plantlets until they have attained some size; but if, here and there, a few seeds have been dropped too thickly, lift them on the point of a sharpened stick and transplant to further pans, rather than allow them to crowd each other. Before any of the leaves touch each other, deal with the whole batch in the same way, carefully lifting the plants with as little damage to the roots as possible, and transfer them to other pans, where the leaves



GIANT BLOOMS OF GLOXINIAS. THESE ARE ORDINARY PLANTS AND ARE NOT RAISED FOR EXHIBITION PURPOSES.

*Photo. Blackmore & Langdon.*



will have more space for expansion. For a few days after this removal, the plants should be kept rather close so that they will not suffer a check. As soon as they begin to grow again, however, expose to the ordinary atmosphere of the house, but watch that the temperature does not fall below that previously advised. When the plants have again made sufficient progress and the leaves nearly touch, they are ready for small pots. This time, the young plants will be quite easy to handle, and no difficulty will be experienced in lifting them with a good ball of soil round the roots. Similar soil to that advised above should be used, save that it need not be sifted, although the leaf-soil should be well broken up and the peat well pulled apart. Place the soil inside the house where the plants are growing, two or three days before it is required for use, and see that it is pleasantly moist. Needless to say, perfectly clean pots must be used, and quite as much care is necessary in arranging the drainage as was the case when filling the pans for the reception of the seeds.

Potting is done in a special way, *i.e.*, the surface of the soil should be made convex so that the leaves "sit" upon a raised mound, and thus, when watering is done, it will drain away to the sides and not lead to damping off at the centre. The soil should be made firm but not too hard, as the gloxinia likes a spongy soil. Return the plants to the shelves, watch the temperature and see that the atmosphere is kept moist. The fine velvety leaves are a great asset in the good appearance of the plants, and full development of these should be encouraged by maintaining plenty of moisture in the atmosphere. The leaves themselves should never be wetted, either by damping or syringing, as they are very liable to decay, especially at the tips, where moisture is most likely to lodge. The best conditions of all are obtained by standing the plants on a closed staging covered by fine shingle or coke breeze, as this can be regularly watered and thus provides an evenly damp atmosphere. Do not make the mistake of crowding your plants: remember that, by the end of the summer, each plant will occupy a 6in. or 7in. pot, over the edge of which the large leaves curve nearly to the base, and therefore sufficient space must be allowed for these and for plenty of air to circulate between them. While the air must not be allowed to become stuffy, anything in the nature of a draught should be strictly avoided, for its chilling as well as its drying effects.

Under genial conditions, rapid growth will be observable, and immediately the first pots are well filled by roots the plants should be transferred to a larger size. Be sure, as these larger pots are reached, that a sufficient depth of drainage is employed, for gloxinias do not root very deeply, and a large body of soil that is not occupied by roots is liable quickly to become sour. Whenever water is applied to the roots, be sure and pour it well to the side of the pot, so that it does not lodge in the crown of the plant, and, at each successive potting, be careful that the crown is not buried beneath the soil. When the first flowers begin to expand, feeding with liquid manures should be commenced and, provided these are used weak and varied as much as possible, applications may be made once a week, taking care, however, that the whole of the soil is first thoroughly moistened. The best way is to well water your

plants with plain water first, then pause while this drains through, and then go round the plants again and apply a small amount of manure water to each.

Another aspect of culture (that should be attended to now) is starting a number of the best of the old tubers, with a view to propagation by means of the leaves. It is necessary to get these into vigorous growth as early as possible, with a view to obtaining large leaves with a thick midrib. The earlier these can be taken off and rooted, the larger and stronger the tubers you will be able to obtain by the autumn, and every week they can be advanced is clear gain. This method of propagation is simplicity itself. When the leaves have reached maturity, detach them from the parent plant and nick the midrib in two or three places. In order to economise room the outside edge of the leaf may be trimmed down to a considerable amount, leaving, however, about an inch of the green leaf on either side of the midrib. Fill a sufficient number of pots with soil, as used for potting, and surface with  $\frac{1}{4}$  in. of clean sand. The leaves must now be laid upon the surface of this, so that, from the nicked



Photo. Sutton & Sons.

#### THE MOST EXOTIC LOOKING OF ALL GREENHOUSE PLANTS. TYPICAL BLOOMS OF GLOXINIAS.

places, roots may form and make their way into the soil.

There are several methods by which the cut surfaces may be kept in contact with the sand, but the one that we have found most satisfactory is using small bent wire pegs pushed through the leaf surface and circling (or rather, half-circling) the midrib. This makes everything absolutely secure and prevents the possibility of their moving during the process of rooting. After each leaf has been firmly secured, the pots containing the cuttings should be covered by a pane of glass or placed in a propagating frame, where the temperature should not fall lower than 65° Fahr. It is most important to keep the atmosphere moist, but not to over-water the soil. This should be kept evenly damp without being wet, otherwise the leaves will certainly begin to rot and decay. Within a few weeks, roots will have pushed out and the cut surface of the midrib begins to form a new tuber. This process is followed by the appearance of leaves and the decay of the original leaf from which they sprang. At this stage, the new plantlets should be lifted from the pots in which they were rooted, potted off and treated as seedlings.

H. W. CANNING-WRIGHT.



## RHODODENDRON HYLOCALLIS

THE question is often asked, What is *R. hylocallis*, or alternatively, what is Farrer's No. 813? In going through Farrer's specimens I find that he suggested the name "*hylocallis*" for his rhododendron No. 812. This (Farrer's *hylocallis*) is named by Sir I. B. Balfour, *R. tanastylum* (Balf. f. et Ward). The type of *R. tanastylum* (Ward 1566) was gathered by Ward (1914) at Hpimaw, East Upper Burma. It is typically a member of the *Irroratum* series and is described by Ward as "a medium sized scraggy bush or more generally thin tree of 20ft. Flowers crimson." Farrer's 812, gathered (1919) above Hpimaw at 8,000ft., is described on the field ticket as "a loose spindly tree of 20 to 30 ft. Flowers a rich crimson scarlet." There is no doubt it is the same as Ward's 1566.

Farrer's 813 is a very different plant. It is a member of the *R. sulphureum* phylum of the *Boothii* series, gathered also in 1919 at 8,000ft. in the upper jungle above Hpimaw. Farrer describes it as an "epiphyte on tree trunks." "Scentless flowers of light sulphur yellow." For this plant Farrer suggested the provisional name of *R. chrysochloron*, but a year later he gathered on the Chawchi Pass at 10,500ft. a plant of field No. 1550. This, he says, equals his No. 813, and adds the comment,

"as before usually epiphytic in masses on moss on old Abies in the high alpine zone." Now, Farrer's 1550 is the second type number of *R. cerinum* (Balf. f. et Forrest), the first type number being Forrest's No. 17592 from the Shweli-Salween divide, collected in 1918. I think there is very little doubt that Farrer is right and that his *Rhododendron* No. 813 and No. 1550 are the same thing.

Thus we have: Farrer's 812 (1919) provisionally named by him *R. hylocallis*, but matched by Balfour with Ward's 1566 (1914), *R. tanastylum*. Farrer 813 (1919), provisionally named by him *R. chrysochloron*, which equals Farrer 1550 (1920), *R. cerinum*, the other type number of which is Forrest's 17592 (1918).

Farrer's 812 and 813 are both in cultivation and to the seedling plants under the No. 813 the name *hylocallis* has in many instances been attached. The explanation of this is that in the privately printed list of Farrer's *Rhododendrons*, 812 is correctly given as *R. tanastylum*, "a tree of 25ft.," but under No. 813, which is correctly described as having "sulphur yellow flowers," there occurs the name *R. hylocallis*, an error probably due to a transposition of type at a time the list was being printed. Unfortunately, this error

is repeated in Mr. Wilding's useful list of "*Rhododendron Names*" and in Mr. Millais' "*Rhododendrons*, Second Series."

Mr. Farrer writes so enthusiastically of *R. tanastylum* (*Gard. Chron.*, April, 1921, page 162) that one awaits the flowering of his 812 and the Forrestian numbers of this species with much interest; the more so as he optimistically states that he does not think "the fear overshadowing the usefulness" as a garden plant of "the lovely and fragrant *R. McKenzianum* which is in full tenderness of shoot in mid-April" need be felt regarding "its contemporary, *R. tanastylum*, for this is a plant of higher elevations and is still in copious bloom in mid-May." Nevertheless, the behaviour of young plants in north and east Britain at any rate leads one to suspect that this optimism was misplaced. It is, perhaps, too soon to be sure of this.

In conclusion, I wish to note an error in the article in the *Gardeners' Chronicle* referred to above. There *R. tanastylum* is given as F. 815. This is apparently a misprint for F. 812. Farrer's 815 is *R. æmulorum*. Plants under this number are in cultivation and, as far as one can possibly tell from foliage of young plants, they are true to number and name.

H. F. TAGG.

## HEPATICA UNDER PERGOLA AT GRAVETYE

BEAUTIFUL spring flowers from the mountains, copses and woodlands of North America and some parts of Europe—though not of Britain—are these harbingers of spring.

With the arrival of February a movement can be observed in their lily of the valley like crowns, and by the time the early days of March arrive a little colour may be observed, and by the end of that month the zenith of their beauty has been reached.

The hepatica should never be planted in full sunshine, for it loves a loose, moist, leafy soil such as the decayed matter found at the base of old hedgerows or ditches and shade which is afforded by summer leafing trees, evergreens of any description being too dense and the soil about them too dry. Under such conditions it is astonishing how well these plants thrive, and the gorgeous effects produced by their profusion of bloom is amazing. The favourite haunt of *Hepatica triloba*—here shown—appears to be the southern oak woods of the Alps, where it is protected from the glare of the sun. It is also one of the mountain plants that creep nearest the Mediterranean wherever the hills approach the sea.

The plants here shown are growing at the foot of an easterly wall and beneath a wistaria-covered pergola, and, as will be seen, little flat stones are placed between the plants which serve to keep them cool and keep down weeds. After the flowers are past, these stones are entirely hidden by the leaves.

This treatment appears to suit the plants admirably, for hundreds of flowers, striking in effect, appear annually from a single plant and form cushions of intense blue.

After a number of years some of the largest plants give signs of exhaustion, and when this does occur the plants are lifted and divided up, after their growth is completed, and fresh plantations made, using a good open and friable soil.

On cold soils the hepatica loses its leaves in winter, but these are to a considerable extent retained in well drained positions.

Personally, I like to see the leaves die off, as the plant is then at rest and flowers better for it; and while in this dormant state advantage should be taken of applying a top-dressing of leafy soil, as the plants revel in it.

Raising from seed is very interesting, for one is never quite sure of the result, and the expectancy of new or varied colour shades, and perhaps something of special note, makes seed raising a fascinating hobby.

The seed should be sown as soon as ripe in boxes of sandy soil, placed in a cool, shaded frame, or even in the open with a slate over it to prevent evaporation and provide shade.

Some of the seeds germinate very quickly and others do not appear until the following spring; these, when large enough to handle should be pricked off into boxes of sandy and leafy soil and grown on in a cool temperature.

*ANEMONE HEPATICA TRILOBA* is, perhaps, the best known of this interesting genus, and there are several varieties—some with double flowers; but, to me, the beautiful blue flowers, with their protruding (white) anthers, place the type plant in front of them all.

A mass of well grown plants of this free-flowering species is a magnificent sight. Hundreds of these plants are grown here, and their amazing beauty each year as this sea of blue arises from the naked earth—and this when most plants are still at rest—is one of surpassing charm.

*A. H. TRILOBA ALBA* is a pretty plant with reddish anthers which are in pleasing contrast to the whiteness of the petals. A double white variety is also occasionally grown and is quite a desirable plant, though rather scarce.

*A. H. TRILOBA CÆRULEA* is a distinct rich blue variety, and a double form of this has very attractive deep blue flowers.

*A. H. TRILOBA RUBRA*, with single rose-pink flowers, must be included in every collection; also its double form, their distinct colours being conspicuously effective when grouped among quantities of the blue shades. I have, however, found these less robust than the other kinds mentioned. Growing here, and in addition to those given above, there is the handsome large-flowered species, *A. H. angulosa*, from the hills of Transylvania, and its lovely varieties, including the white one.





WELL GROWN CUSHIONS OF ANEMONE HEPATICA TRILOBA WITH HUNDREDS OF FLOWERS OF INTENSE BLUE.

A. H. TRILOBA ACUTIFOLIA, from the Central United States.

A. H. TRILOBA BARLOWI, a distinct and lovely blue flower.

A. H. SESSILATA, in which the calyx protrudes beyond the flowers; and

A. H. VARIABILIS, with curiously mottled leaves.

The other species from Hungary, known as angulosa and already referred to, grows in tufts like other hepaticas, with large blue, white or reddish flowers.

Among its lovely varieties are such as alba, with pure white flowers; rosea, a rose-coloured form; lilacina, with lilac-coloured flowers. All these forms are excellent when grown in the wild border for very early spring bloom. E. MARKHAM.

## SOME PROMISING FOREIGN ROSES OF 1922

MOST of the new foreign roses only reach us a year after the British varieties are available, and it is therefore a matter of some difficulty to arrive at a definite opinion on their merits or faults after the results of only one year's growth.

The 1922 new foreigners do not promise very much on the whole. So far there is no suggestion of any characteristics or qualities to equal the British varieties of that year, such as Betty Uprichard, Lady Inchiquin, Admiration, Lord Charlemont, Sovereign and Mabel Morse.

A few of them however, which have come under our special notice as showing signs of promise, we will proceed to refer to and describe in detail.

IDEAL, Dwarf Poly. (Jan Spek).—This is a sport of Edith Cavell, which it somewhat resembles. The colour is dark scarlet, and blooms are full. Growth about 12 ins. high, and its foliage is clean, small and neat.

ELVIRA ARAMAYO, Pernetiana (P. J. Looymans).—Very bright and unique India red colour. The buds are pretty,

but the blooms are rather shapeless and rough. It was shown in the decorative classes at Croydon by Messrs. D. Prior and Son, and the colour was startling but there was hardly a decent-shaped bloom. Height about 24 ins., and foliage fair. Massed in a bed, it should make a wonderful splash of bright colour.

EMILE CHARLES, Pernetiana (P. Bernaix).—A sport of Mme. Edouard Herriot, which it resembles exactly so far as growth is concerned, and that unfortunate habit of hanging its head. The colour, however, is much paler, being almost a light coral pink. Height about 24 ins. It bloomed well in autumn.

GENERAL SMUTS, H.T. (G. A. van Rossem).—Origin: General McArthur × Mme. Edouard Herriot. Very bright deep coral red. Semi-double blooms. Tall and erect growth about 30 ins., resembling General McArthur.

SUBSTITUT JACQUES CHAPEL, H.T. P. (Bernaix).—Origin: Mme. Melanie Souper × Lyon. Large blooms of peach-blossom colour, cupped shape, and very fragrant. Very strong grower, but the

weight of blooms bends the trusses over. Height 24 ins., and gives good autumn blooms. A promising bedding rose.

SOUVENIR DE F. BOHE, H.T. (C. Chambard).—A seedling of Willowmere, growth being almost identical, but the blooms are a pretty pale coppery pink. It is catalogued as an H.T., but should surely rank with its foster-parent as a Pernetiana.

GOOLAND, H.T. (G. A. van Rossem).—Origin: Sunburst × Red Letter Day. Bright pink colour with reverse of petals darker, reminding one of Mrs. E. G. Hill. Slightly scented. Height about 30 ins. Continuous bloomer till late in the autumn.

These are our first impressions on seven varieties out of about fifty varieties on trial, under conditions which, as this last summer, gave the poorest opportunity for the establishment of their true merit. We shall, therefore, be able to write at greater length and with more confidence after the results of careful observation during a second year's growth, under weather conditions which approach more closely to the ideal.

HERBERT L. WETTERN.



# PRUNING FRUIT TREES

PRUNING HAS PROBABLY GIVEN RISE TO MORE LITERATURE THAN ANY OTHER BRANCH OF HORTICULTURE, BUT AS THE WRITER POINTS OUT PRACTICE IS THE ONLY SURE TEACHER.

**P**RUNING is one of the most interesting and important, yet difficult, of all operations connected with fruit culture. It is an operation which cannot be satisfactorily learned theoretically. Only practical experience will enable anyone to solve the many problems which are sure to arise.

There are certain principles upon which the art of pruning is based, such as why to prune and when to prune, which are readily learned. Exactly how to prune is not so easily grasped. So many factors play a part in how it should be done, that it is impossible to lay down any hard and fast rules on the subject. Factors involved are such as soil conditions, which may vary so much as to cause two trees of the same variety to grow quite differently in one place from what they do in another. The root system, too, plays an important part, and the eventual pruning of many fruit trees can be largely gauged by knowing the stock on which the tree is worked, and training the tree to the shape suitable for the root system.

Manuring, too, will have some bearing on the question; for instance, much nitrogenous manure together with hard pruning would have a tendency to produce a lot of growth at the expense of fruit buds. On the other hand, phosphates and potash with a minimum of pruning would tend to excessive fruit bud formation.

Many varieties, too, differ in their habit of growth, and naturally shy-bearing varieties have generally to be treated differently from an acknowledged regular cropper. In addition to these largely controlled factors, there has to be considered the uncontrolled one of climatic conditions. This may be such as to militate against the setting of the fruit or ripening of the buds, with the result that a tree which has not to undergo the strain of carrying a crop will, in most cases, tend towards the making of wood. It is, in fact, necessary to study each tree individually before touching it with a knife. Every pruner should, therefore, use judgment or, to put it plainly, common-sense in pruning each tree.

Regrettable as it is to make the statement, it is nevertheless true that very large numbers of fruit trees are almost ruined during the three or four years following their purchase from a nursery. Of course, this does not apply to the garden where a trained man is responsible, but rather in the amateur's garden or where a man in charge is more or less in the nature of a handyman and does not profess to be skilled in fruit culture.

Oftentimes the owner is keenly interested in his fruit trees, and is glad to get any hints on the way things

should be done. Strangely enough, however faulty the pruning may have been heretofore, the amateur owner seems to imagine that, once the trees have been pruned properly, fruit will automatically follow the next season. As, however, the trees often have to be reshaped after years of wasted energy, it must obviously take some time before a full crop can be expected.

It is the first few years of the tree's life after leaving the nursery which are so important. If skilled attention were then given to continue the training to whatever shape it was intended to be, whether half or full standard, bush, pyramid, espalier or cordon, the resultant pruning would be much simplified. A young tree is usually cut rather hard for the first few years; the object is to aim at producing wood and to train the tree according to the desired shape with regularly formed branches, and to produce a well balanced tree. Once it has got to bearing age, though, the training will be continued in a modified manner until the tree is fully developed, the future pruning will be such as to assist the tree in maintaining a perfect balance between sufficient growth and fruit buds.

Briefly to deal with the training and pruning of young trees: In the case of the cordon, the length should be built up gradually, and the leader pruned back each year according to its strength, usually from one to two feet, until the required height is reached. The lateral or side growths should be summer pruned, usually in July for apples, and a little earlier, according to the season, for pears, plums and cherries (sweet)

to six or eight leaves. At the winter pruning these growths will be cut back to two or three buds and induced to form fruiting spurs. The espalier, which has usually two or three pairs of horizontal branches and a leader when bought, has to be strictly attended to until the required number of tiers—usually five or six—are made. The space between each tier should be about twelve to fifteen inches.

The central leader must be allowed to grow each year and tied to keep it vertical, and at winter pruning cut back to a good bud to continue the leader. Two branches for training right and left to form the next tier should be encouraged, and tied down in position. These horizontal branches will be required to be cut back at each winter pruning in the same way as the cordon, until the allotted space is filled, and the same attention paid to side or lateral growths for making fruit spurs.

As distinct from the espalier, which usually arrives from the nursery perfectly formed, the bush-shaped tree generally requires a little shaping.

The best form for the bush is one with six



A BUSH APPLE UNPRUNED.



equally placed branches making an open centre, with a stem or leg at least a foot from the soil. The six branches may need some guidance to induce them to grow just where wanted. Also to obtain equality of vigour in these six cordon-like branches, it may be necessary to encourage or retard a branch by raising or bending it, thus directing the flow of sap to assist to that end. The lateral growths and extension of leaders will be treated as advised for cordons.

The pyramid is seldom grown commercially, but is in general use in private gardens, especially for pears. This type of tree differs from the bush by having a central stem from which branches are encouraged to emanate at regular intervals. These and the leader are gradually built up by shortening back during winter, according to their strength, and treating laterals as advised for other forms.

The standard is best formed with six main branches. This will ensure a good open centre, so necessary for the future well being of the tree. Should the tree arrive from the nursery with a head of three branches, these should be cut back to about a foot from their bases and two growths encouraged from each. As the tree develops, sub-mains will be allowed to grow in sufficient numbers to fill the spaces, but never to such an extent as to cause crowding.

The debatable point as to whether a tree should be pruned or not pruned the first year or season of planting is best, again, treated with judgment. The time of planting and the root system should be the guide. If planted early in the autumn and the roots are in good condition, pruning is best done in the ordinary way. If planted late in winter or early spring the tree has lost the start of the early-planted tree by about 25 per cent., and is perhaps best not pruned. If, however, watering and mulching could be attended to during summer, and even late spring if necessary, the chances are that time would be gained by pruning at planting time if the roots are in good order, instead of waiting till the following winter.

Once a tree has got to bearing age and size it should go on annually increasing in size, and proportionately increasing its weight of crop until the maximum development is reached. During this time the trained tree will require to be annually pruned by shortening the leaders according to their vigour, and to prune the lateral growth and spurs in such a way as to maintain a perfect balance between the production of wood growth and fruit buds.

Winter pruning can be done at any time from the fall of leaf till early spring. Pruning at this time, when the tree is in a dormant state, tends to the production of wood. When a tree is making too much growth and not bearing much fruit it is a sign that the balance between the roots and the branches has been upset by too much pruning.

Climatic or other conditions which prevented fruiting may have been conducive to this undesirable condition, and



THE SAME TREE AS OPPOSITE, BUT PRUNED.

the tree relieved of the strain of carrying a crop has spent its energies in making growth. In such a case, to continue orthodox spur pruning would not improve matters. The pruner must then resort to other means to restore the balance and induce the tree to make fruit buds. Often the advice is to root prune to help remedy this excess of wood formation, but this should not be done unless other means fail. Root-pruning is better done before the trees come into bearing.

Young trees which show signs of excessive vigour should be lifted carefully, any strong roots pruned back and the tree replanted. This should be done, when possible, in early autumn. Root-pruning is almost certain to be necessary with young plum and cherry trees, and probably so with apples and pears. But other means should first be tried to bring the over-vigorous tree into a productive state, *i.e.*, instead of pruning back the lateral growths to two or three buds, which is the usual practice, some of the more vigorous should be left their entire length, to serve

as a kind of exhaust valve for excess of sap. Others may be shortened half their length. The medium size growths should be spurred back to two or three buds, and the weak ones cut out entirely. During the following growing season less growth will be made, and the wood buds on the vigorous shoots will probably be transformed into fruit buds.

When these extension growths have fruited, they may be cut out. In the meantime, others, in lesser numbers, should be left each season. This method of pruning invariably tends to restore the balance, and by such means I have seen trees, which were a thicket of growths, restored to perfectly balanced trees carrying good crops of fruit.

The other side of the question is too little growth and an excess of fruit buds. To re-adjust this, harder pruning should be the aim, with, possibly, attention to other governing factors. The pruning of the well balanced tree is an easy matter, other factors being favourable.

Standard trees, whether they be apples, pears, plums or cherries, after the heads are completely formed, require very little pruning. What little there is to do is regarded more in the nature of thinning out branches annually. This should be done sufficiently, to prevent any danger of crowding, so that full sunlight can reach all parts of the tree. The cutting of plums and cherries, especially the latter, should be avoided as far as possible, or gumming may set in and cause loss of branches.

It is scarcely necessary to mention that all diseased and dead wood should be removed and burnt. Any signs of canker should be attended to by cleanly cutting out the injured part. As each tree is completed all such places and any cut surfaces above  $\frac{1}{2}$  in. in diameter should be painted over, either with white lead paint or coal tar. A sharp knife should always be used, and clean cuts will generally heal quickly. A. J. COBB.



# PRIMULAS for the CONSERVATORY & GREENHOUSE

THESE CHARMING SPRING FLOWERING AND COOL SEASON PLANTS ARE SUITED FOR ALMOST ALL CONDITIONS, AND IN THIS ARTICLE THOSE SPECIES WHICH WILL BE FOUND TO GIVE SATISFACTION INDOORS ARE DEALT WITH

**P**RIMULAS in quite a number of species and varieties are very popular and useful for greenhouse and conservatory decoration, and by sowing at different periods the greenhouse is seldom without some representative of the genus.

*Primula sinensis* (Chinese primrose) in its many varieties is very popular, and deservedly so when one considers the wide range of varietal forms, which includes so many colours, and most of them good pure colours. Another important point is the fact that all the varieties offered for sale come true from seed. *P. sinensis* was first introduced from China in 1820, and is described and figured in the *Botanical Register*, 1821, t. 539; as *P. prænitens*. It is also figured in the *Botanical Magazine*, 1825, t. 2564, this later figure very much resembling the *P. sinensis stellata* forms of to-day. *Primula sinensis* has never been found wild, but was a cultivated plant in China when first introduced to this country. It has never been crossed with any other species, and the many beautiful varieties of to-day have been obtained by careful selection, and cross-breeding between the several varieties. *P. sinensis* may be separated into several sections, viz., the smaller-flowered single varieties, which includes a set of fern-leaved varieties, and a set of doubles; there is also a set of so-called giant forms, and lastly the stellata varieties, with their graceful free-flowering habit which makes them so useful and popular for decorative work. All the sections include a wide range of colours, varying from pure white, light and dark blue, pink, salmon-pink, red, scarlet and crimson. Some of the varieties also have fine dark foliage. One of the newest varieties, *Etna*, has almost black foliage with fiery crimson-coloured flowers. This fine variety, which was distributed by Messrs. Sutton and Sons, is interesting because it was bred on Mendelian lines at the John Innes Horticultural Institution, Merton.

Seed for general purposes should be sown during May and June in a warm greenhouse, the compost consisting of equal parts of good mellow loam and leaf-soil, with the addition of some silver sand. As the seed is always irregular in germinating, it is very important that it be sown thinly; this allows of the more forward plants being removed without disturbing the more backward ones. The seed pans should be kept shaded until germination takes place; during the earlier stages a temperature of 50° to 65° Fahr. is most suitable, avoiding draughts and direct exposure to sun. When fit to handle, the young seedlings may be pricked off into pans or into 48-sized pots. When large enough the young plants should be placed in thumb pots, afterwards shifting them into larger pots as they require it, until they are in 5in. pots, in which they should be flowered, taking care not to re-pot them until they are well rooted. The compost for the final potting should consist of about four parts good medium loam, two parts well decayed leaf-soil, with one part old mortar rubble or sand. Water should be carefully afforded at all times, and at no time must there be any attempt at coddling. From July up to the middle of September they are best grown in cold frames or low airy pits, affording them ample ventilation on all favourable occasions, and shading them during bright sunshine.

About the middle of September they should be placed in a bright airy house, keeping them well up to the roof glass. By growing them on for a second year fine large specimens can be produced: the stellata varieties are specially fine when grown in this way. Plants from a June sowing may be used for this purpose, or a later sowing may be made during August, growing the plants steadily on until they are in their flowering pots, which may be 6in. or 7in. in size. If the older plants are used they can stand in their flowering pots—5ins.—until the following May, when they should be turned out and have some of the bottom leaves trimmed off. The balls may be reduced so that they can be returned to the same sized pots, taking care to pot them low down, as fresh roots will be produced from the old stems. They should be kept close and moist until they are established.

When well rooted they should be shifted into 7in. pots, afterwards giving them plenty of air, and treating them in every respect as advised for the younger plants.

At one time there was a set of plants with double flowers of various colours, but, with the exception of the old double white, they have been lost to cultivation for many years. They doubled in a different way from the present-day strains. The double white is, however, still grown for market and decorative work, being very useful for making up in floral arrangements. This and all the old double varieties have to be propagated by means of cuttings or division.

During spring and early summer the shoots should be severed from the parent plant and inserted singly in small pots, standing them in a close case with slight bottom heat; or the bottom leaves of the old plants should be trimmed off, and they should then be mounded up with leaf-soil and sand. When roots are emitted the plants should be severed and potted up separately into small pots. Their after cultivation is the same as that accorded the seedling plants, except that this variety enjoys slightly closer and warmer conditions.

*Primula obconica* was introduced in 1879, and flowered

during 1880, and during 1881 was figured in the *Botanical Magazine*, t. 6582, as *P. poculiformis*. For some ten or fifteen years this plant seems to have shown little variation. After variation started new forms quickly appeared, and the many fine varieties at present in cultivation have little resemblance to the original plant, with its poor washy-coloured flowers, which the writer remembers before this plant had commenced to show signs of variation. Interesting as its development is up to the present day, it is not within the writer's province to deal with that side of the question.

In common with *P. sinensis*, *P. obconica* now affords a wide range of forms and colours, varying from pure white, blue, with varying shades of pink and rose to deep crimson. The form and size of flowers also vary greatly, as well as the size of the leaves. This primula has a somewhat unenviable reputation for its poisonous character, for it causes intense irritation to some individuals when they handle it. It has been stated that the present-day race is not so poisonous, but in the writer's experience it is just as virulent as ever, and nearly every year we have cases of men who cannot handle this plant without suffering.



A GOOD VARIETY OF THE STELLATA SECTION OF PRIMULA SINENSIS.



The successful cultivation of this primula presents few difficulties, as it succeeds under the same treatment as that advised for *P. sinensis*, only, on the whole, it is less exacting in its requirements than the *sinensis* varieties, and by making successional sowings it may be had in flower more or less all the year round. For early autumn flowering a sowing should be made during March; while for winter and spring flowering sow from May to July. Seed should be sown in a warm greenhouse, the subsequent cultivation being on the same lines as advised for *P. sinensis*, *i.e.*, perfectly cool treatment in cold frames or pits during the summer months. This primula is a free-rooting plant, and when it has filled its flowering pots with roots, enjoys liberal feeding.

Although *Primula malacoides* from western China was discovered by Père Delavay in 1884, its introduction is due to Mr. G. Forrest, who collected it during 1905 and 1906. From the seed sent home to Mr. Bulley of Neston, plants were raised which flowered during 1908.

This dainty primula soon became popular, and is now grown in large quantities for decorative work. Under cultivation it soon showed signs of variation, for in 1912 white and double forms are recorded. The flowers also vary considerably in size and colour.

It succeeds perfectly under the same conditions as *P. sinensis* and *P. obconica*; indeed, the plant is nearly hardy, for during mild winters it will stand outdoors. It grows very quickly, and it is a mistake to sow it too early, at least in the immediate neighbourhood of London, for such plants get overcrowded with foliage, which is very apt to suffer from damp during the winter. Of course, this may not occur in the country, where better light conditions obtain.

Seed may be sown in a cool house or frame from May to July, according to requirements, giving it the same treatment as advised for the other species. For general work they are best flowered in 48-sized pots; on the other hand, for special decorative purposes perfect little specimens can be produced in 60-sized pots. Such plants are very useful for table decoration and for making up vases and baskets.

Although *Primula verticillata* was introduced from Abyssinia in 1870, it is by no means so generally grown as it



A TYPICAL MEMBER OF THE MALACOIDES SECTION.



ONE OF THE MANY VARIETIES OF PRIMULA OBCONICA

deserves to be, as it is a very distinct plant with pale yellow flowers, and foliage covered with white, mealy powder. It is also interesting as being one of the parents of *P. kewensis*. Seed is best sown during August, or at least early in the year, as this plant is somewhat slow in its younger stages, and at least fifteen months must be allowed to produce good flowering plants in 48-sized pots; such grown on in 6in. pots for a second season really shows this primula at its best. It succeeds under the same conditions as *P. sinensis* or *P. obconica*, growing quite well in any good potting compost.

*Primula floribunda* is a native of the western Himalayas and was introduced in 1883, and is the other parent of *P. kewensis*. It has yellow flowers and grows from 4ins. to 8ins. in height, and is a pretty little plant for the small greenhouse. The flowers vary somewhat in colour and size, the variety *Isabellina* having creamy white flowers. Its successful cultivation presents no difficulty as it succeeds under the same conditions as the other greenhouse primulas, and excellent examples can be produced in 48-sized or 60-sized pots. If seed is sown during May the plants will flower during the following winter or spring.

*Primula kewensis* occurred as a chance seedling among a batch of *P. floribunda* at Kew in 1899. The original plant was sterile and had to be increased by division. At the present day it is almost unknown, and is scarce in cultivation, its place being taken by the seed-producing form which was sent out by Messrs. James Veitch and Sons. It was a pity this form was not given a varietal name, as it differs in many ways from the original *P. kewensis*, which is a much more dainty and graceful plant. But space forbids me dealing with the interesting history of this plant.

Turning to its cultivation, it presents no difficulty, as it succeeds perfectly in a cool house or cold frame during the summer months. Seed for successional batches may be sown from March to July. Good examples may be flowered in 5in. or 6in. pots.



*Primula Forbesi* is a dainty little primula which may be described as a miniature *P. malacoides*. It is useful for the small unheated greenhouse. If seed is sown during August or

September the plants will flower the following spring. It succeeds perfectly in a cool house, and several plants may be placed in a 48-sized pot.  
J. COURTS.

## BOOKS ABOUT PLANTS.—II

### GENERAL BOOKS.

THE next phase in a gardening library is that of works of reference, books which, however full of information, are not suitable for what might be called thorough reading. They are in constant use and lie on a shelf by themselves; in fact, they are the backbone of a gardening library.

There are two cyclopædias; one, which I mentioned in the first article, Nicholson's "Illustrated Gardening Dictionary," in five volumes; the other is an American publication of Macmillan's, the "Standard Cyclopædia of Horticulture," by L. H. Bailey, in six volumes. This is rather an expensive publication and is, of course, primarily intended for the guidance of horticulturists in the United States, but in the absence of a modern English encyclopædia it is of great value to gardeners throughout the British Isles. It deals with practically everything in common cultivation in this country, but leaves out many of the new and rare plants which are not grown in the United States.

Of dictionaries in one volume the most important are "Johnson's Gardening Dictionary," published by Messrs. Routledge, and "Black's Gardening Dictionary," by E. T. Ellis and published by A. and C. Black. The former was first published many years ago, but has been brought fairly up to date; it is certainly the most handy volume in which to look up the bare details about a plant. "Black's Gardening Dictionary" is not quite so comprehensive as regards plants, but is more complete in work to be done in the garden. Both of these books are important in their way, as handy time savers. However, gardening, as a rule, is not an occupation to be hurried, and we must look to some of the general compendiums for useful information in more solid form.

For beginners—and, indeed, for everybody—as a book of reminders, the first and the best book on the general subject is "Gardening for Beginners," by E. T. Cook, published by *Country Life*. This volume deals with everything that may concern the ordinary gardener; it has run through many editions, and there is a new one in preparation which is being brought thoroughly up to date. Another work of the same kind, although written for more advanced gardeners, is "My Garden Book," by John Weathers, published last year by Longmans Green. It is a great work and gives details even of such subjects as garden accounts. Another useful book on a smaller scale is the "Real A.B.C. of Gardening," by A. J. Macself, one of the "Home Garden" books of Thornton Butterworth.

One of the greatest difficulties in the garden is the question of colour: this is a subject which causes more argument than any other. There are practically only two books on colour, "Colour Schemes for the Flower Garden," by Miss Gertrude Jekyll, a *Country Life* book which deals with the subject both from an æsthetic and a practical point of view, and "Colour Planning of the Garden," by Messrs. Tinley, Humphries and Irving, and published by Jack. This is the first book which has dared to make a comprehensive list of plants under their colours. It was a bold idea and, on the whole, has been excellently carried out, although in a few cases gardeners may not see eye to eye with some of the colour classifications of the authors; still, it is a step in the right direction, for many

are the heart-burnings every year owing to mistaken colour grouping of plants.

Mention must also be made of the great book written by the founder of this paper, "The English Flower Garden," by Mr. William Robinson, issued by John Murray. It is so well known and admired that no description of it is necessary, but still, after all these years it is used as a standard work upon garden flowers. One constantly receives letters from all over the world quoting it as the authority. Two other books by Miss Jekyll, both published by Longmans Green, have an established reputation; they are "Wood and Garden," and "Home and Garden."

After this we come to a number of works dealing with wide divisions of horticulture. Of these by far the most important are "Trees and Shrubs Hardy in the British Isles," by W. J. Bean, published by John Murray, and "The English Rock Garden," by Reginald Farrer, published by Jack. Both of these are in two volumes and are the standard works on their respective subjects. Both trees and shrubs and alpine are now in the heyday of their popularity, and it will be long before these comprehensive works are superseded. For those who wish smaller volumes on the same subjects and still treating them on a broad basis, I can recommend "Alpine Plants," by A. J. Macself, published by Thornton Butterworth, a very useful book at a moderate price; and W. J. Bean's "Shrubs for Amateurs," published a few months ago by *Country Life*. Both of these are invaluable for anyone who does not intend to specialise in these subjects and yet wishes to possess a representative collection. There is another excellent book on trees and shrubs called "Gardening for the Twentieth Century," by Charles Eley, published by John Murray. Farrer wrote another smaller but charming book on the rock garden, called "Alpine and Bog Plants," issued by Edward Arnold. This is slightly out of date by now, if, indeed, any of his books can be called out of date, but is filled with useful information and advice as to the successful cultivation of alpine. For those who love the old-fashioned herbaceous border there is a most excellent book by Mrs. Philip Martineau, called "The Herbaceous Border," which is published by Williams and Norgate. It, also, is full of useful information, with lists of plants, and deals with a subject which is still the backbone of most British gardens. Another, which deals partly with herbaceous borders and partly with bedding plants, is "Annuals and Biennials," by Miss Gertrude Jekyll, and published by *Country Life*. This is, as is usual with Miss Jekyll's books, full of charm and is exceedingly useful. Another slightly smaller book is "Hardy Perennials," by A. J. Macself, published by Thornton Butterworth. This also gives excellent lists of perennials and is an admirable book on the subject.

There are a number of books on vegetables, from Mr. Robinson's big book, "The Vegetable Garden," published by John Murray, now in its third edition, which is the standard work on the subject, and, perhaps, a little too large for the ordinary gardener, down to a little *Country Life* booklet on the "Storing of Vegetables and Fruit," by Herbert Cowley.  
M. C. E.

## SERVICE FOR READERS

Though so many subjects are dealt with in each issue of THE GARDEN, it must constantly happen that readers seek information which is not immediately available. In such circumstances they should make use of our new Service Department. Through its medium each reader's own particular enquiry can be dealt with. No matter what the question is, whether advice is sought as to—

RESTOCKING A GARDEN, COLOUR SCHEMES FOR GARDENS, THE BEST PLANTS FOR CERTAIN SITUATIONS, WHERE TO OBTAIN NEW AND RARE PLANTS, INSECT PESTS, NAMING OF PLANTS, AND THE HUNDRED AND ONE OTHER DETAILS RELATING TO THE GARDEN—

there is always information available from a staff of expert contributors and consultants; and there is no charge for this. It is one of the additional means of Service which THE GARDEN is glad to render to its readers.

Also, there is the further convenience which the Service Department affords of supplying readers with data about anything that is advertised in the pages of the paper. Thus, on receipt of an enquiry, particulars will be sent of, say, half a dozen things about which the reader seeks information. The only stipulation is that a stamped addressed envelope shall be sent with the enquiry.

All communications should be addressed to the Service Department, THE GARDEN, 20, Tavistock Street, Covent Garden, London, W.C.2.



# THE FIRST SHOW OF THE YEAR

THE exhibits and attendance of the initial Show of the year at the Royal Horticultural Society's Hall, Westminster, on January 12th last, does not in any way, we hope, serve as a true criterion of what lies in store for the horticultural public during 1925. The displays were small and the attendance meagre, at least during the morning. Doubtless the previous two or three days of fog had caused all intending exhibitors to quit, and one must not blame them. Despite the lack of a large display, there were one or two rather pleasing exhibits which served to stimulate and reinvigorate one with the promise of spring and its sunshine and flowers.

One of those was the small but excellent display of Messrs. James Carter and Co. of *Iris tingitana* (the Tangierian iris) in baskets. It is only within recent years that the value of this plant has been recognised as an ideal

In spite of the recent weather, the carnations shown at the Hall this week were, on the whole, in remarkably good condition. Some bore evidence of the ill effects of fog on their petals. The nurseries of Messrs. C. Engelmänn at Saffron Walden are in a fortunate situation where they are rarely troubled to any extent by fog. The two other firms exhibiting carnations were Messrs. Allwood Brothers and Messrs. Stuart Low and Co. Messrs. Engelmänn's carnations were all good in shape and form, and the colours clear and bright. Of particular interest was a new variety called Red Laddie, which has just been introduced by this firm. The flowers were large, a pinkish red, and borne on exceedingly strong, wiry stems of exceptional length. Towards the centre of the flower the pink shaded to white. In a few months' time, when the flowers will probably be of a slightly better colour, this carnation will

carnations. Several of their novelties were of unusual shades, Coral Glow being a new shade of terra-cotta. A brilliant scarlet flower with a perfect calyx was Edward Allwood, while White Pearl was the best white of any of the exhibits. George Allwood, a most attractive salmon shaded a deeper tone towards the centre, could not have failed to please the most critical. There were many other varieties, such as Topsy, Eileen Low, Wivelsfield Apricot, all of equal merit and whose praises have already been sung.

The neatly arranged exhibits of alpine and dwarf shrubs with fresh and dainty flowers, some peeping through the beds of peat-moss litter in which they were plunged, made one feel that spring really is on its way. Bulbous and tuberous-rooted plants in the rock garden are of great value. Those that bloom during the late autumn, winter and early spring are exceedingly welcome, and die down leaving room for the spring-flowering perennials to develop. Early bulbous irises, spring and autumn flowering crocuses, snowdrops, cyclamens, muscari, eranthis and sternbergia are all examples of this type of plant. Messrs. Waterers were exhibiting crocuses, narcissus, cyclamens and primulas, as well as other alpine and shrubs. On their stand the soft mauve of *Crocus Sieberi* shaded into the deeper mauve of *Viola granda*, which formed an excellent contrast against the tiny bright yellow of *Narcissus minor*. The value and effectiveness of the early irises are not fully realised, and from this exhibit their beauty could be well appreciated. *Iris Sind-pers*, with its pale blue flowers crested with orange, and the deep purple of *Iris reticulata* and *Iris stylosa*, are all good examples. Also *I. sinda reichi* and *I. histrio*, shown by Messrs. Cutbush, should not be forgotten; and *Scilla sibirica* and *Crocus versicolor*, exhibited by the same firm, add to the general list of bulbous plants for the rock garden.

The chief points of interest on Messrs. Cheal's exhibit of shrubs and alpine were the dwarf conifers. They were in excellent condition and of good habit. Among them were six of the best dwarf conifers for the rock garden—*Cupressus Lawsoniana lutea*, *Thuja elegantissima*, *Cupressus Fletcheri*, *Picea excelsa Maxwellii*, *Retinispora obtusa nana*, and the smallest of all, *Cupressus minima glauca*. Any shrub to be used in the rock garden should be neat, small and compact in habit, and yet not stiff in form. Conifers have the advantage of being attractive throughout the whole year and slow growing. Messrs. Cutbush also had a large and varied collection of shrubs and alpine. The two shades of *Cydonia Maulei* and *C. M. superba* looked very fresh against some of the conifers, such as *Picea nidiformis*, *Juniperus japonica aurea* and *Abies balsamea Hudsonica*. A dainty little shrub shown by this firm, with minute bell-like white flowers, was *Andromeda polifolia*. The berried shrubs were naturally past their best, *Cotoneaster horizontalis* being in poor condition; but *Pyracantha Lelandi* still held a fine supply of orange berries.

Some of the other exhibits were the following:

*Apples and Pears*.—Messrs. Bunyard and Co.

*Citrus*.—Mr. Cecil Hanbury.

*Cyclamens*.—Messrs. Stuart Low and Co., Caledonian Strain Floriculturists.

*Orchids*.—Mr. G. F. Moore; Mr. H. T. Pitt; Messrs. Saunders and Co.

*Roses*.—Elisha J. Hicks.

*Rhododendron Leaves*.—Messrs. B. and C. McLaren.

*Shrubs and Greenhouse Plants*.—Messrs. L. R. Russell, Limited.



IRIS TINGITANA, A SUITABLE WINTER FLOWERING SUBJECT FOR CONSERVATORY DECORATION.

winter-flowering subject for indoor, conservatory decoration. Certainly the plants displayed by Messrs. Carter showed these merits off to distinct advantage. The plants were of good habit and growth, from 18ins. to 2ft. in height, the stems standing stiff and erect, bearing two flowers. The flowers, which are large, are of a delicate blue shade stained with yellow down the centre of the falls. It is a plant which deserves wider and more popular recognition in the future, and Messrs. Carter's exhibit should do much to kindle an interest in the plant.

A most interesting and varied collection of citrus fruits was on show from Italy through the kindness of Mr. Cecil Hanbury. To anyone who has visited Italy, the sight of the citrus groves is one long to be remembered. One can almost breathe it in the atmosphere. The main species which were on show were *Citrus decumana* (grape fruit) of all sizes and varieties; *Citrus Aurantium*, with one or two hybrids; *Citrus medica* and *C. obilis*. These were all well grown and showed the results of careful cultivation and attention. It was quite a unique display at this time of year.

be a valuable asset and should become very popular. Another new variety, medium in size and in colour soft apricot striped with red, has been named Dainty. Such well known varieties as Saffron, Mrs. Hamilton Fellows, Jazz and Laddie showed that they still maintain their excellent reputation. A most useful variety for commercial purposes which was exhibited was Donald, a bright crimson with a perfect calyx and long stiff stems. Messrs. Stuart Low, who have raised many of the carnations which are now in cultivation, staged an excellent exhibit, including some of their past and new introductions. Among those raised within the last year were Sir Philip Sassoon, one of the best crimsons; Lady Hindlip, a white flecked with red; and Mauve Queen. The latter is somewhat incorrectly named, as the colour, which is attractive owing to its uncommonness, is lilac pink. The deep salmon shade of Lady Inverforth was conspicuous by reason of its intensity. For good habit of growth scarcely any surpassed the deep scarlet carnation, Lord Lambourne.

Messrs. Allwood were exhibiting perpetual, border, and their famous Allwoodii



*Shrubs and Alpines.*—Messrs. Carter Page and Co.; Mr. G. Reuthe.

*Garden Contractors.*—Johnstone Garden Contractor Company.

*Gardening Books.*—Messrs. Cassell and Co., Limited.

*Landscape.*—Mr. Percy S. Cane.

*Vegetables.*—Messrs. Sutton and Sons.

*Horticultural Sundries, Tools, etc.*—Abbott Brothers (bird boxes and nests), Ashtead Pottery, Limited (china bowls); E. R. Bugge (sprays and powders); Chase Continuous Cloche Company (adaptable plant protectors); Carter (labels and insecticides); A. Everitt (gardening gloves); Thomas Gunn, Limited (tools); Hardy Patent Pick Company, Limited (spades); J. Jardine (Médoc and Guienne secateurs); London Garden Florists (bowls); Radium Fertiliser Company (fertilisers); Mrs. E. Torkington (Wizard plant labels); John Pinches (labels); "Socleano," Limited (labels); Fraser Treleaven and Wilkinson, Limited (flower-pots); Charles H. Pugh Limited ("Atco" motor mowers); Ymagynate Pottery (china bowls, etc.); W. Wood and Son (sundries and tools).

## NEW AND RARE PLANTS.

*PRIMULA MALACOIDES* COURTLAND SEEDLING.—This dainty little species, introduced from China in 1908, with its mallow-like leaves, has been much improved upon in late years, and there now exist several fine varieties. This variety, Courtland Seedling, had as many as twenty flower stems with more numerous whorls of flowers of a rose-lavender shade. The flowers were of good substance and size, while the plant has retained its elegance and grace of habit. The plant appears to be of good constitution, having, no doubt, inherited its robustness from malacoides. Award of merit. Shown by Mr. P. W. Carver, Courtlands, West Hoathley, Sussex.

*PYCNOSTACHYS* DAWEL.—This plant, with its short terminal spikes of deep blue flowers, is a valuable novelty from Madagascar and will be found to be of extreme service in conservatory decoration. One advantage which it has is that it will thrive at a fairly low temperature. It is a stout herb of from 4ft. to 6ft. high, with a loosely branched pyramidal habit with many crowded flowers. It certainly is a plant which deserves wider recognition. Award of merit. Shown by Mr. L. R. Russell, Richmond.

## ORCHIDS.

*CYPRIPEDIUM STAMPERLAND* VAR. *ALPHA* (Glorita × Christopher var. Grand Duke Nicholas).—A finely developed flower, with all the segments well above the usual size. The dorsal sepal greenish, bordered with white and evenly spotted with purple; labellum broad and, with the petals, yellowish in colour, stained with red-brown. From Mr. Robert Paterson, Cathcart, Glasgow. Award of merit.

*CYPRIPEDIUM WORSLEYI* (Hestia × Lady Dillon).—This handsome hybrid is characterised by the dorsal sepal being boldly marked with large spots evenly distributed on a white ground, the basal area greenish; the broad petals bear brownish-red markings. From Mr. H. Worsley, Stonehouse, Haslingden, Lancs. Award of merit.

*CYPRIPEDIUM* MRS. *ELEY* VAR. *DERRICK* (Christopher × Warrior).—An attractive flower having the dorsal sepal orbicular in shape, green at the base, white above; petals and labellum yellowish, marked with brown lines and spots. From Mr. G. F. Moore, Chardwar, Bourton-on-the-Water, Glos. Award of merit.

*LÆLIO-CATTLEYA* *PEPITA* VAR. *SPLENDENS* (L.-C. St. Gothard × L.-C. Colmaniana).—A promising hybrid with compactly formed flowers, of deep mauve-pink colour evenly distributed throughout the sepals and petals, the labellum rich purple, and with the margin prettily crisped. From Messrs. Cowan and Co., Southgate. Award of merit.

A gold medal was awarded to a splendid exhibit of cypripediums staged by Mr. G. F. Moore, Chardwar, Bourton-on-the-Water, Glos.

## NATIONAL ROSE SOCIETY.

ALTHOUGH the two hundred or so of members who attended the annual general meeting of the National Rose Society at the Caxton Hall, Westminster, on January 13th, is a small proportion of the 12,000 members, it was quite a satisfactory attendance. As Mr. H. R. Darlington remarked, when seconding the adoption of the Council's Report, it is notorious that shareholders usually take but little interest in annual meetings when the concern is successful, so the assumption is that the members are entirely satisfied with the management. Of the extraordinary success of the National

Rose Society there can be no doubts. The membership increases amazingly, the balance on the year's working is enviable and gratifying, and £1,000 has now been invested in Great Western Railway stock, making a reserve fund of nearly £7,000.

Although the Society has been in existence about forty years, it does not seem very long ago when the members were numbered by hundreds, and, when comparatively recently, they became over two thousand, it was thought to be immensely successful. As Mr. Preston-Hillary said, the present success is due to the untiring energies of the hon. secretary, Mr. Courtenay Page, and the policy of the Council in, what we may term, giving the members value for their money.

The greatest interest of the meeting was centred in the proposal which appeared on the agenda, "That the Council be and is requested and authorised to apply to His Majesty's Privy Council for the incorporation of this Society by Royal Charter." In proposing the adoption of the motion, Mr. Preston-Hillary reminded the meeting that a similar proposal was made a year ago, when it was referred back for further consideration. The Council had appointed a sub-committee of four, who had given an enormous amount of time and consideration to the matter and, with the exception of Mr. H. R. Darlington, they strongly recommended the Council to apply for Incorporation. After full consideration of the sub-committee's report, the council had decided by 26 votes to 5 to recommend the annual meeting to adopt the proposal. A copy of the proposed Charter had been circulated, and Mr. Preston-Hillary briefly reviewed the salient points, emphasising the need for safeguarding the officials of the Society and the added dignity and improvement which would accrue. He also said that although Mr. Darlington strongly dissented, he had been of the greatest assistance to the committee in drawing up the proposed Charter. The motion was seconded by the Rev. J. H. Pemberton, who remarked that he was one of the oldest members of the Society and that he was strongly of the opinion that the growth of the National Rose Society demanded the improved constitution.

As there were no other nominations, the officers were all re-elected, and during the course of the meeting the result of the ballot of forty-two members for thirty-six seats on the Council was made known.

# SPRAYING MACHINES

QUITE a few years ago, when writing of material improvements which had been effected in spraying machines by leading British manufacturers, I expressed the view that little room appeared to be left for further improvement in what might be termed vital points.

My admiration of the machines of that day was genuine, and perhaps the more profound by reason of the fact that while I had a lively interest in the work of a spraying machine I had nothing of that inventive genius which belongs to the masters of engineering and mechanism. To that is doubtless attributable my error in supposing to be impossible what has, in fact, been achieved; for the spraying machines of to-day embrace a number of improvements which, now that we have them, are readily recognisable as being of real importance.

Such recognition is, of course, dependent upon a full appreciation of efficiency

in spraying machines, and it is my firm conviction that the machine is of even greater importance than the spray, because with a defective instrument the value of the best chemical mixtures prepared can be nullified.

In commercial circles spraying has made remarkable strides of late years, and to-day all successful fruit farmers, nurserymen, and also hop growers, include systematic and seasonal spraying among the essential items in their working programme. Amateurs are less progressive in this matter, for the simple reason that they have not the same facilities for acquiring a knowledge of all that spraying means, and in various ways the amateur is handicapped.

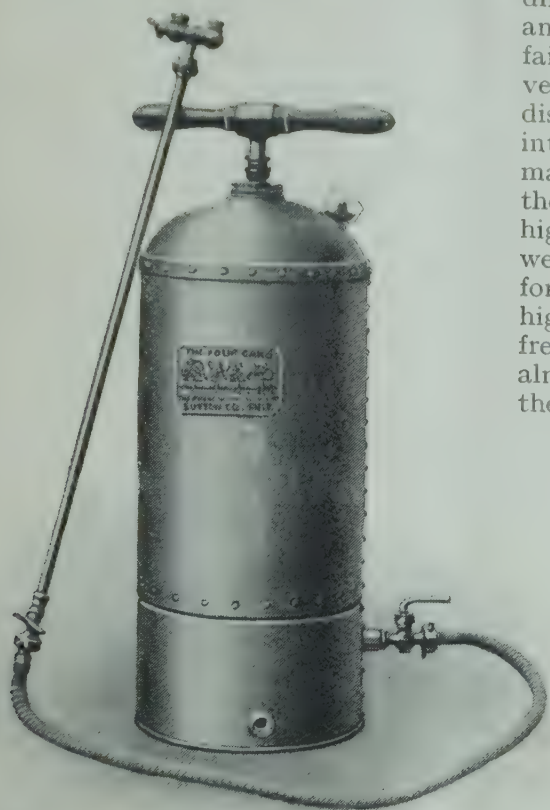
The commercial man, for instance, is provided with opportunities to witness practical demonstrations and tests by which he learns the advantages of the thoroughly efficient machine. He comes into direct contact with representatives

of manufacturers who are competent to explain the particular points which make for success, and he therefore walks in the path of knowledge.

The amateur, lacking such privileges, is frequently thrown back upon the salesmanship of a stores assistant who deals with a spraying machine as he would with a vacuum cleaner or a knife cleaner. To one who has no practical experience the brightly lacquered container, the polished handle and general finish of an "X.Y.Z." type of machine makes as strong an appeal as the technically perfect "A.B.C." type, and price naturally becomes a deciding factor. Even when, upon good advice, one may ask for a machine of a certain model, a shop assistant may readily satisfy a client that "here is an equally good, or perhaps practically the same machine." The great point, however, is that polish and appearance are of precious little account; the essentials are strong, durable pumps of great driving power,



convenient shape for carrying, carefully devised means of filling, acid-resisting plungers, washers, etc., good lances,



surface of a tree a difficult and somewhat uncertain task. For a long time the method of filling machines of moderate dimensions was tedious and cumbersome, and altogether one needed a very strong faith in the power of spraying to persevere doggedly with a sometimes very disagreeable task. Thanks to careful interchange of views and ideas between manufacturers, pathologists and chemists the improvement of machines made highly gratifying progress, and to-day we have sprayers of convenient size for all requirements which are both highly efficient and are at the same time free from complicated operation. I had almost used the common expression that the machines of to-day are fool-proof.

When first the pneumatic spraying machines were introduced there was a division of opinion as to their value. Some urged that the charging of the machine with compressed air was simple child's play compared with the continuous pumping while the machine was harnessed to one's back. Others declared that the former was the harder work, that it was impossible to gauge the correct pressure required to discharge the whole contents of the machine, and they made much of the fact that the time occupied in charging

the machine with air was greater than the time the sprayer could be kept working. These arguments held some weight, but that was before the advent of the "Weeford Pattern" knapsack sprayer, for which we have to thank The Four Oaks Spraying Machine Company, who have consistently kept abreast of the times in spraying matters.

The outstanding features of the Weeford are: the container or tank is made of brass alloy, which will withstand acids, alkalis and the combinations of chemicals used for spraying purposes; the machine is filled from the bottom by attaching a hose-pipe and pumping the liquid from a tub or bucket. The advantage of this method is that there is no over-running or spilling of fluid, as so often happens when the machine is filled from the top with the aid of a funnel.

Furthermore, it is unnecessary to re-charge the machine with air at every refilling, for upon shutting off the tap when the spray is exhausted the air is kept in the tank, and once pumping suffices for the day.

Other good points about the Weeford machine are the well fitted hose and lance and finely manufactured nozzles. The Four Oaks Company have always paid close attention to their nozzles, and two specialities worthy of note are the "Unchokable," which automatically clears itself in the event of a hard particle clogging the aperture, and the "Seneca," which is fitted with a lever, by turning which the spray may be made fine or coarse at will.

With such a machine the usual pump-fitted type of knapsack would seem to face a great rival, but there are excellent

machines of that character for those who prefer them.

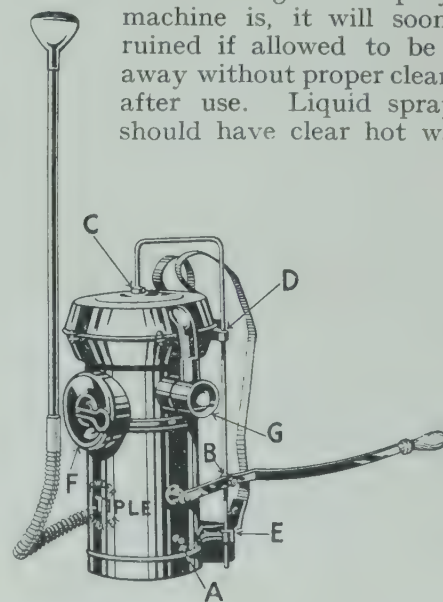
There is a distinct advantage in having the pump outside the machine instead of inside the tank, because whenever a new plunger is required it is a simple matter to disconnect the parts.

Of late years, dry powder spraying has gained considerable favour, and manufacturers have applied themselves diligently to the problem of meeting the demand for an efficient powder distributor of a capacity suitable for the requirements of an average garden.

Even distribution is as essential in the case of powder sprays as in the case of liquids, and the trouble with the earlier patterns of distributors was that they discharged the powder in successive gusts, depositing too dense a covering in one place and practically none elsewhere. The "Multiple" knapsack powder sprayer of Messrs. Robinson Bros., Ltd., is so finely constructed that efficient and even delivery is maintained, and with reasonable attention to a few simple details the machine may be kept in good working order for a prolonged period.

In the accompanying illustration of the machine the important "parts" are indicated by the letters as follows: A is a regulator button by which the discharge may be controlled; B is the plunger rod pivot, which will require occasional tightening after being in use for some length of time; C is termed the "stuffing-box"—here an occasional oiling will be required; D and E are guides for the plunger rod, where grease must be applied to assist easy working; F is the lid which, fitted with a pneumatic pad, must be shut down truly after filling, otherwise there will be a leakage while pumping; G is a dual valve port, a single valve port being on the opposite side of the machine. The leather valves are hinged, and upon their proper working depends the maintenance of ample force to drive the powder through the lance.

However good a spraying machine is, it will soon be ruined if allowed to be put away without proper cleaning after use. Liquid sprayers should have clear hot water



poured in after the spray has been used, and by vigorously discharging this the interior of the machine will be cleaned. The outside should be thoroughly washed and wiped down with a dry cloth.

Powder machines should not be washed, but well brushed, and must be stored in a dry shed. A. J. MACSELF.



# SIMPLE GARDENING

## POTTING BEDDING-OUT PLANTS.

**D**URING August and September many thousands of cuttings of bedding-out plants are propagated in pots, pans and boxes. The cuttings chiefly dealt with are those of zonal pelargoniums, marguerites, heliotrope and calceolarias; but many more are cuttings of more tender plants. All, however, are usually crowded closely together in the pots and boxes, and it would result in partial failure if they were retained in them till the next bedding-out season came. So preparations should be made now to shift the cuttings to small pots, placing one specimen in each pot. Many of those cuttings of pelargoniums will not possess roots even now—only a hard callus with roots faintly showing through it. These plants will live through the winter in the condition referred to, but cuttings of other kinds rarely do. A good compost of loam, leaf-soil and sand will be suitable for the majority of the bedding-out plants, the more tender kinds requiring a greater addition of leaf-soil. The pelargoniums and other plants possessing few roots should be placed on one side, as the work of potting goes on. For these, extra sand should be mixed with the compost and a pinch of it placed at the base of each badly rooted specimen as potting is done. When the plants are potted they should be watered, but for a short period afterwards watering will not be necessary. Shelves and stages in the warm greenhouse should be occupied by the newly-potted plants.

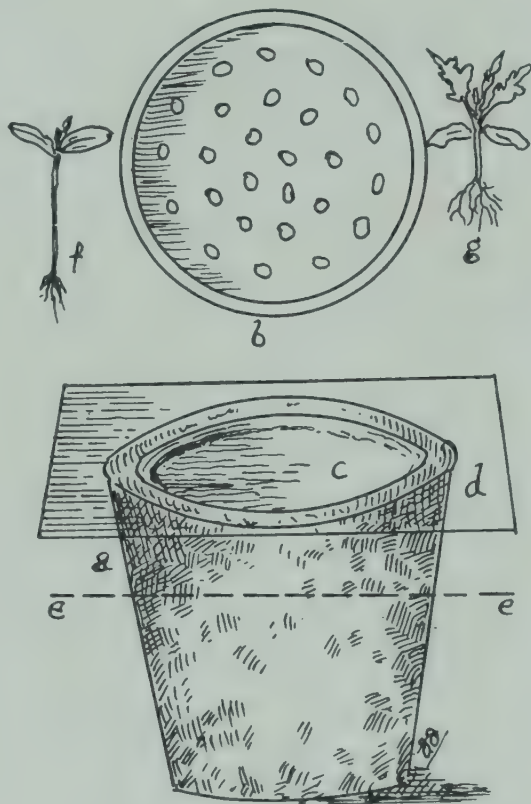
## SOWING SEEDS.

This is the beginning of the seed-sowing season when every lover of a garden, and especially every one who possesses a greenhouse or frame, will be busy with the first batch of seeds. These will be seeds of half-hardy annuals, for both greenhouse and garden, mainly. Of course, everything outside is cold now, and it would be bad policy to fetch soil pots and other requisites from outside stores and forthwith use them for the benefit of the seeds. Rather should all these things be brought into the greenhouse in boxes and allowed to remain there for a week or so before they are used. But in the meantime they should be prepared, the pots and crocks washed clean and dried and the soil sifted, a portion passed through a half-inch mesh sieve, a small quantity through a quarter-inch one and the remainder through a rin. mesh. The latter will be just suitable for placing in the bottom of box, pot or pan. For all half-hardy annuals, such as asters and salpiglossis, boxes may be used and soil of an intermediate fineness, the more finely sifted portion being used to cover them the right depth. Of course, drainage should be sound, the surface soil level and watered before the seeds are sown on it, the covering soil not watered afterwards. For all dust-like seeds, such as those of begonias, the surface should be a little more sandy and no covering

soil put on. Till germination takes place all seeds should be kept from the light.

## RAISING EARLY TOMATO PLANTS.

Tomato plants are very similar to stove house plants: if they are not kept warm at this season of the year they soon fail, turn yellow, lose leaves and become very stunted, if they do not actually die. It would be bad advice if I encouraged cultivators to attempt to raise tomato plants at this early date without sufficient fire-heat. If a warm greenhouse is available, the work of raising young plants may be got on with. But many persons fail to grow the seedlings satisfactorily when they can command unlimited artificial heat. Fine soil answers well enough in the case of other kinds of seeds and resultant seedlings, but where tomatoes are concerned it frequently causes failure. The



seed pot or pan should be well drained, dry and clean, especially inside. The compost should consist of fibrous loam, reduced by hand, not sifted; leaf-soil, not too fine, either; and a nice sprinkling of old mortar rubble, in this case passed through a half-inch mesh sieve. Having filled the pot rather more than three parts, as shown at letter *a*, proceed to make tiny holes rin. apart, shown at *b*, and half an inch deep with a blunt stick, drop one seed into each hole and fill them with fine soil, cover the pot *c* with a loose square of glass, *d*, and water when necessary by immersing the pot in water to the dotted line, *e, e*. Spindly plants, *f*, result when sowing is too thick, stocky plants, *g*, when seeds are sown as advised here. The seedlings need not be transplanted at a very early stage, and they rarely damp off as weaklings do.

## EARLY CELERY, BRUSSELS SPROUTS AND CAULIFLOWERS.

The inexperienced cultivator must be very careful in the treatment of early celery plants, as any undue check to growth will result in "bolting." Too much heat, especially bottom heat, will also cause the plants to run to seed. Later, when temperatures are, generally, higher, plants raised under cooler conditions rarely run to seed. The few seeds sown now should be scattered evenly and thinly and just covered with fine soil. Place the seed pan on a shelf in a warm greenhouse, not in a propagating frame. For a very early crop a white variety is best. Brussels sprouts require a long season of growth, then the side sprouts will be firm and fit for use at an early date—in November. The plants are gross feeding, so it would be unwise to make use of poor soil for raising the young plants in. A fairly rich compost moderately firm is the most suitable. I prefer old chrysanthemum soil; failing such, use fibrous loam two parts, leaf-soil one part and well rotted manure one part. Sow the seeds in boxes, watering the soil first, but not after they are covered with fine loam; the seedlings break through in a more kindly way than is the case when the soil on them is caked. Cauliflowers should be treated in a similar way, but the tiny plants are more tender. In both cases any undue coddling would be harmful to the growths. Frame treatment is best, just keeping out frost and excessive moisture. The first transplanting should be done when the plants possess two rough leaves.

## WINTER-FLOWERING CARNATIONS.

In some gardens these plants are propagated nearly all the year round. The amateur cultivator should insert cuttings freely now, as they are fairly plentiful and will form roots in a few weeks' time without the aid of bottom heat. The side shoots that make the best cuttings are those growing about 6ins. from the base of the flowering stem. Those shoots nearer the top are too sappy for cool treatment, but may be inserted where a gentle bottom heat is available. Of course, a propagating frame in a warm greenhouse is the ideal place in which to root the cuttings, but as such is not available in every garden a simple box arrangement should take its place. I have used boxes for many years with great success; they measure 2ft. by 18ins. and 12ins. deep. In the bottom a thin layer of quite rotted leaf-soil is placed, then a layer of washed sand 2ins. deep. The cuttings are inserted about 2ins. apart each way and then watered. The covering glass is wiped dry morning and evening, but care is taken to avoid overdryness of sand. The latter must be maintained in a moist condition, and to ensure this the cuttings are freely watered when the sand begins to dry up, the glass being left off the frame nearly a whole day at that time, but not at any other. GEO. GARNER.



# Unwin's Sweet Peas

Known and grown  
all over the World.

Have proved their superiority. Compare our prices and remember there are no Sweet Peas of better quality obtainable.

You will eventually grow Unwin's.  
Why not **this** Season?

## FULL CATALOGUE

Post Free  
of SWEET PEAS,  
GARDEN SEEDS,  
GLADIOLI, Etc.

## OUR "GOLD MEDAL" COLLECTION

Imp. Faerie Queen (flushed); Picture (cream-pink);  
Royal Scot (scarlet); Austin Frederick Imp. (lavender);  
Matchless (cream); Constance Hinton (white); Unwin's  
Crimson (crimson); Hebe (pink); Warrior (maroon);  
Royal Purple (purple); George Shawyer (orange-salmon);  
Mrs. Tom Jones (blue).

25 seeds each of above 12 for 3/- (300 seeds).  
12 " " " 12 " 1/9 (144 seeds).

Postage 1½d. extra.

Two Books on Culture every Grower should read:

## "THE SWEET PEA AND ITS CULTIVATION"

and its 1925 "Supplement." By W. J. UNWIN.

These books contain all the information the amateur needs, given in a simple, detailed and interesting manner, and illustrated by explanatory sketches. They have helped thousands to grow better Sweet Peas. Why not let them help you?

Price 9d. the two (Post free for 10½d.)

W. J. UNWIN, F.R.H.S., Sweet Pea Specialist, HISTON, Cambs.

Please mention THE GARDEN when writing.

# WATTS' GIANT POLYANTHUS-PRIMROSES

AS SUPPLIED TO H.M. OFFICE OF WORKS FOR THE ROYAL GARDENS AND THE LONDON PARKS

A LIMITED QUANTITY OF SEED OFFERED

	Per pkt.
YELLOW.....	1/- & 2/6
YELLOW AND WHITE.....	1/- & 2/6
WHITE.....	1/- & 2/6
RED, CRIMSON AND DARK.....	1/- & 2/6
BLUE AND VIOLET.....	5/-

THE WELSH BULB FIELDS—ST. ASAPH.

Please mention THE GARDEN when writing.

## FRUIT TREES, ROSES & ORNAMENTAL SHRUBS

ETC.

GUARANTEED ENGLISH GROWN

"Buy the Best,  
They Stand the Test."

Descriptive Catalogue FREE on application

THE FOREST AND  
ORCHARD NURSERIES, LTD.

MULLBURY HEATH • FALFIELD • GLOS.

Please mention THE GARDEN when writing.

IE-BREWED WINES AND UNFER-  
ED BEVERAGES for all seasons of the year. By  
AMATEUR. A helpful booklet containing also recipes for  
drinks, and published at 9d., post free 11d., at the Offices  
COUNTRY LIFE, LIMITED, 20, Tavistock Street, W.C.2.

## ODODENDRONS and AZALEAS

Intending Planters will find at  
THE KNAP HILL NURSERY  
LARGE SPECIMEN PLANTS  
in finest named varieties,  
GIVING IMMEDIATE EFFECT.

Ordinary stock as per Catalogue

post free upon application.

INSPECTION INVITED.

Particulars and descriptions upon application to

The Executors of the Late  
ANTHONY WATERER  
Hill Nursery, Woking Station, Surrey

Please mention THE GARDEN when writing.

## Reliable Lincolnshire Seed Potatoes

Specialty Selected Stocks.—Sharpe's Express, Eclipse,  
Sir John Llewellyn, British Queen, King Edward's,  
Queen Mary, Ally and Majestic. Large or small quantities

—When writing please state quantity required to—

W. DENNIS & SONS, LTD.  
(Dept. No. 12), KIRTON, BOSTON, Lincs.

Please mention THE GARDEN when writing.

## HARDY ORCHIDS

Cypripedium acaule, 3/6 each; Cypripedium specta-  
bile 3/6 each, strong clumps, 5/- and 7/6 each, a few  
extra large, 10/6 each; Orchis foliosa (The Madeira  
Orchid) 2/- and 2/6 each, 18/- and 24/- per dozen

T. SMITH, Daisy Hill Nursery, Newry, Co. Down

Please mention THE GARDEN when writing.

"NEVER WORKED SUCH A SATISFACTORY AND ECONOM-  
ICAL GREENHOUSE HEATING APPARATUS AS YOUR

## 'HORSE SHOE' BOILER"

WRITES ONE OF THE MANY ENTHUSIASTIC OWNERS.

"I have two, one heating a long Vinery and one a little Hothouse. Last autumn 12/- worth  
of slack finished off the Grapes, and we sold £3 worth, besides what I gave away. This  
spring all seeds raised in a case over the boiler in the hothouse . . . fires settled up  
about 5.30 require no attention till 7.30 next morning. I thought we ought to let  
you know this."—May 7th, 1924. Miss—, Traverston, Nenagh, Co. Tipperary.

Why not investigate the sterling qualities of the "HORSE SHOE,"  
and get that heating proposition settled now?



Used in the  
R.H.S. Gardens

To CHAS. P. KINNELL & CO., LTD.,  
Engineers, Southwark Street, S.E.1.

Please send me Booklet E "Making the most of your Greenhouse," and price  
of complete outfit to suit (span-roof) (lean-to) greenhouse . . . . . 10/-  
wide inside, sides of (wood) (brick) . . . . . thick

Name.....

Address.....

\*Strike out particulars not needed. Cut out and send by 1d. post.

Wire:  
"Kinnell-Boroh-  
London."

CHAS. P. KINNELL & CO., LTD.  
65, SOUTHWARK STREET, LONDON, S.E.1

'Phone:  
Hop 362  
(Three lines).

Please mention THE GARDEN when writing.



# FRUIT TREES OF QUALITY

Bush Apples in all leading varieties,  
18/- per doz.  
Bush Plums in all leading varieties,  
2 6 each  
Trained Plums in all leading varieties,  
3 - each  
Damsons, Merryweather, a fine fruit-  
ing strain, 2 6 each

All these trees are guaranteed clean and  
healthy, they have grand roots and are  
very hardy.

Catalogue free on application to Dept. B.

**MORSE BROTHERS**  
"DEBEN NURSERIES"  
MELTON · WOODBRIDGE · SUFFOLK

Please mention THE GARDEN when writing.

**ANTIRRHINUMS AND PENTSTEMONS,**  
by A. J. MACSELF. A practical booklet on the best methods  
of cultivating these popular flowers. 9d. net; by post, 11d.  
Published at the Offices of "COUNTRY LIFE," LIMITED, 20,  
Tavistock Street, Covent Garden, W.C.2.

# DOG TRAINING BY AMATEURS

A HANDBOOK OF INSTRUCTION FOR SPORTSMEN

By R. SHARPE, with a foreword by MAX BAKER.  
64 Illustrations. 7/6 net.

Some extracts from reviews:

"Here is a book written by the expert for the unexpert  
Mr. Sharpe must be hailed as the Montessori of the  
dog world."—*Times Literary Supplement*.

"... we feel sure that if any man will study the pages  
of 'Dog Training by Amateurs,' and conscientiously follow the  
advice and precepts therein given, he will be sure of success."  
—*Shooting Times*.

"... given virgin soil, patience, kindness, and common  
sense, I do not see how Mr. Sharpe's system can fail."—*Sportsman*.

Published by "COUNTRY LIFE," LTD., 20, Tavistock Street,  
Covent Garden, London, W.C.2.

## THORNTON BUTTERWORTH LTD

### THE 'HOME GARDEN' BOOKS

#### No. 7 A Real A.B.C. of Gardening

A. J. MACSELF

"A book which, while most informative, is  
easy for the beginner to follow, and helpful  
to the more advanced."—*Garden Life*

Illustrated

6s. net

#### No. 6 The Horticultural Exhibitor

A. J. MACSELF

"All who make a practice of competing at  
the shows will find this volume a sound  
investment."—*Edinburgh Evening News*

Illustrated

3s. 6d. net

#### No. 5 Alpine Plants

A. J. MACSELF

#### No. 3 Bulb Gardening

MARY HAMPDEN

#### No. 4 Hardy Perennials

A. J. MACSELF

#### No. 2 Town Gardening

MARY HAMPDEN

#### No. 1 Rose Gardening

MARY HAMPDEN

Illustrated in Colour, Half-tone and Line

6s. net each

Prospectus 'G' of this Series post free on application

READY SHORTLY: No. 8 Flowering Trees and Shrubs and  
No. 9 Gladioli by A. J. MACSELF Illustrated 6s. net each

15 BEDFORD ST. LONDON W.C.2

## Blackmore & Langdon's 'Superb' Gloxinias

UNSURPASSED FOR QUALITY AND VIVID COLOURING.

DUKE OF YORK, scarlet, edged white.  
HER MAJESTY, lovely pure white.  
PINK PRINCESS, flowers white, with margin of pink.  
MAUVE PRINCESS, flowers white, with margin of  
mauve.

ROYAL PURPLE.  
SCARLET KING.  
SUPERB ROSE.  
SUPERB CRIMSON.  
SPOTTED AND NETTED HYBRIDS.

THE DUCHESS, purple violet with white edge.

Corms of the above, 2/6 and 3/- each. May be had in separate  
varieties or in extra fine mixture at 18/-, 24/- and 30/- per dozen.

**SEED** Mixed Varieties, 1 6, 2 6 and 5 - per packet. In separate varieties,  
each kind, 1 6, 2 6 and 5 - per packet. Collection of 9 varieties, 10 6

Write for Illustrated Catalogue of BEGONIAS, DELPHINIUMS, CYCLAMEN, PHLOX, etc., to

**BLACKMORE & LANGDON, BATH**

**MATTHEWS'**  
HIGH GRADE  
HORTICULTURAL  
FERTILISER

COMPARE  
ANALYSIS

## MATTHEWS'

# BIG PRODUCTION FERTILISERS

**MATTHEWS'**  
HIGH GRADE  
TOMATO  
FERTILISER

COMPARE  
ANALYSIS

**PROFITABLE  
GROWING  
IN  
1925**

EXHIBITION & PROFIT

**MATTHEWS'**  
"Maximum Crop"  
**GARDEN  
SEEDS**

**SCOTCH SEED  
POTATOES**

Choice Flower Seeds  
Finest Spring Bulbs

Write for Catalogue  
IT WILL PAY  
YOU

THOUSANDS OF TONS SOLD ANNUALLY		Amn	Phos.	Potash	lbs.	cwts.
<b>MATTHEWS'</b>						
For POTATOES & GENERAL GARDEN use.		7%	21%	4%	14	28
<b>TOMATO</b>		9%	21%	6%	3/3	5/9
<b>LAWN</b>		4%	25%	2%	3/6	6/6
NOTE—double value compared with some that are sold.					10/9	20/-
Bone Charcoal ...	1 5/8	67%	—	—	22/6	42/-
Bone Meal, English, Best	4 5/8	45%	—	—	3/-	5/6
Basic Slag ...	—	30%	—	—	10/-	18/6
Bone Flour, Steamed	1	60%	—	—	34/-	—
Fish Manure ...	10	14%	—	—	2/9	5/-
Garden Salt ...	—	—	—	—	9/-	16/6
Hoof and Horn ...	16	—	—	—	30/-	—
Kainit ...	—	—	14%	—	2/9	5/-
Lime, Ground Carbonate, Superfine	—	—	—	—	9/-	16/6
Meat and Bone Meal	8 5/8	18%	—	—	16/6	30/-
Meat Meal	8	30%	—	—	7/6	13/-
Nitrate of Soda	18	—	—	—	12/6	24/-
Peruvian Guano	14 1/2	22%	2 1/2%	—	3/6	6/6
Sulphate of Ammonia, 21% Nitrogen	25 7/8	—	—	—	12/-	22/6
Sulphate of Potash	—	—	50%	—	22/6	42/-
Superphosphate	—	35%	—	—	8/-	14/-

**MORE PROFIT  
THROUGH  
EXTRA YIELD  
AND  
IMPROVED  
QUALITY.**

**MATTHEWS'  
LAWN SAND**

Effectively kills all the com-  
mon weeds in lawns, and at  
the same time acts as an  
excellent Fertiliser. Sprinkle  
evenly over the weedy  
patches, at the rate of 3-ozs.  
per square yard, in dry  
weather Repeat at inter-  
vals of a few weeks, till the  
weeds are killed. The grass  
will become brown and  
appear to be burnt, but it  
will recover, and the useful  
grasses will grow more  
vigorously.

4/- 14lbs. 6 6 28lbs.  
10 9 56lbs.  
20/- cwt.

CARRIAGE PAID on orders to the value of 5/- upwards to the nearest station in the United Kingdom

ESSEX RESIDENTS 1/6 per cwt. less. Packing and Bags Free; not returnable.

**JAMES & GEO. H. MATTHEWS,** Head Office: **HAROLD WOOD, ESSEX**

And at COLCHESTER, ONGAR, BRENTWOOD, CHADWELL HEATH, WICKHAM BISHOPS and BRIGHTLINGSEA

Phone: ROMFORD 284



# THE GARDEN.

**WATERER'S GOLD MEDAL RHODODEN-**  
DRONS, Azaleas and Roses, rare Hardy Shrubs, Fruit Trees,  
Berries, etc., Alpine and Perennial Plants, Vegetable and Flower  
Seeds, Scotch-grown Seed Potatoes. Catalogue free.—JOHN  
WATERER, SONS & CRISP, LIMITED, Twyford, Berks; Bagshot,  
Surrey; and London.

**WAKELEY'S PATENTED HOP MANURE.**  
The original and only substitute for Stable Manure. See  
advert. on p. vi.

**WM. DUNCAN TUCKER & SONS, LTD.,**  
Lawrence Road, South Tottenham, N.15.—Conservatories,  
Winter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**BIRDS' BATHS, GARDEN VASES, SUN-**  
DIALS, NESTING BOXES. Catalogue (No. 4) free.—  
MOORTON, 60, Buckingham Palace Road, S.W.

**RIVERS' ASPARAGUS.**—Strong roots, one,  
two and three years old. Fruit trees, Roses, Vines and Orchard  
house trees of first-class quality. A large stock always on view.  
Inspection invited. Price list post free.—THOS. RIVERS AND  
SON, LIMITED, The Nurseries, Sawbridgeworth, Herts.

**ALPINES FROM THE FINEST COLLEC-**  
TION in the West of England, 150,000 pot-grown plants,  
including many rarities. Descriptive Catalogue free. Hardy  
orchids a speciality.—BOWELL AND SKARRATT, The Alpine  
nurseries, Cheltenham.

**TANNED GARDEN NETTING, small mesh,**  
5yds. by 1yd., 2s.; 25yds. by 2yds., 4s.; 40yds. by 1yd.,  
3d.; 40yds. by 2yds., 6s. 6d.; 40yds. by 3yds., 9s. 9d.,  
carriage paid. Compare our netting with others. Lists now  
ready.—GALLOP, Net Manufacturer, Hastings. Telephone: 352

**TO LOVERS OF ROCK GARDENS.**—Inex-  
pensive plants for Sale. Apply NELL SHAW, Hatfield Place,  
Bath.

**WELLS' CATALOGUE OF CHRYSANTHE-**  
MUMS now ready, and will be sent post free on application.—  
WELLS & Co., Merstham, Surrey.

**WM. ARTINDALE & SON, Nether Green**  
Nursery, Sheffield, will be pleased to send their Catalogues of  
Hardy Plants, Seeds and Gladioli on request.

**ALPINES, ROCK PLANTS ONLY.**—Descrip-  
tive Catalogue 600 varieties, free.—TERRY LEE, F.R.H.S.,  
Morden Road, Stechford, Birmingham.

**ALPINE AND HERBACEOUS PLANTS.**—  
For the Mixed Border, for Rock Gardens, large or small, for  
borders in one colour, or for special seasons. We supply Ideas  
as well as Plants, and shall be pleased to submit plans.—  
LEPPARDS, Shawhurst Nursery, Hollywood, Birmingham.

**ROCK PLANTS, best varieties, inexpensive,**  
free.—MARION GLEDSTANES, Fardross, Clogher, Ireland.

**AN GARDEN COLOUR BE ATTAINED**  
THE DULL WEEKS OF WINTER? Mr. A. J. MACSELF  
answers this question in "FLOWERING TREES AND  
SHRUBS," his latest addition to the "Home Garden Books."  
This book, for its concise and practical treatment of the subject,  
will be welcomed by all keen gardeners. Send for prospectus  
the "Home Garden Books" to the Publishers—THORNTON  
BROTHERS, LTD., 15, Bedford Street, Strand, W.C.2.

**IPSWICH RARE SEEDS.** Catalogue de-  
scribing nearly 3,000 kinds now ready. Free on application  
THOMPSON AND MORGAN, London Road, Ipswich.

**HERBERT CHAPMAN'S Bargain List of Job**  
lots of Choice Daffodils, offered in order to clear ground, is now  
ready, and will be posted to anyone sending a P.C. to HERBERT  
CHAPMAN LTD., Rotherside Gardens, Rye, Sussex.

**ROCK GARDEN SUBJECTS, alpine plants,**  
mountain conifers, shrubs, in 2,000 kinds, including over 180  
kinds of Saxifrages alone. BORDER PLANTS, including over 50  
kinds of Hellebores, FLOWERING SHRUBS, etc. All the best.  
The Catalogue shows how to make a water garden, tells about  
making a rock garden, soils, etc., and methods of planting.  
Special attention to orders and enquiries. Over 50 years of  
experience in growing hardy subjects.—MESSRS. J. STORMONTH  
AND SON, Kirkbride, by Carlisle.

**BARR'S FLOWER & VEGETABLE SEEDS,**  
of finest selected strains and tested growth, also the best Scotch  
grown, hand-picked Seed Potatoes, strong Asparagus Plants, etc.

**BARR'S HARDY PERENNIALS, ALPINES,**  
ROCK PLANTS, AQUATICS, CLIMBERS, TALL and DWARF  
FLAG IRISES, etc., for Spring planting.

**BARR'S LILIES, GLADIOLI, DAHLIAS,**  
CANNAS, MONTBRIETIAS, ANEMONES, BEGONIAS,  
TUBEROSES, TIGRIDIAS, &c., for Spring planting. Catalogues  
free.—BARR & SONS, King Street, Covent Garden, W.C.2.

**THE DOUGLAS CLOVES AND BORDER**  
CARNATIONS; glorious scent, stiff stems, and continuous  
flowering. The new crop of seed is now ready to sow. 2s. 6d.  
and 5s. per packet. Plant catalogue now ready.—J. DOUGLAS  
(The Premier House for Carnations), Gt. Bookham.

**A FEW SHRUBS WORTH GROWING:**  
Embothrium, Tricuspidaria, Pittosporums, Mimosa (6 sorts),  
Hardy Eucalyptus, Eupatorium, Clanthus, Habrothamnus,  
Viburnum tomentosum, Coronilla glauca, Sollya heterophylla,  
Drimys Winteri, Calceolaria violacea, also Hardy Tree Ferns,  
Woodwardia and Chamaerops. We solicit your enquiries.—  
TRESSEDER & Co., Nurseries, Truro.

**IRON AND WIRE FENCING FOR GAR-**  
DENS.—Ornamental Iron and Wire work of every description.  
Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue  
G. 65. Wood and Iron Gates. Catalogue G. 103. Kennel  
Railing. Catalogue G. 86. Poultry Fencing. Catalogue G.  
70. Ask for separate lists.—BOULTON AND PAUL, LIMITED,  
Norwich.

**ALL PROFESSIONAL GARDENERS should**  
become Members of the British Gardeners' Association. Full  
particulars (stamp).—JOHN WEATHERS, 1, Park View, Isleworth.

**SEWAGE DISPOSAL FOR COUNTRY**  
HOUSES.—No emptying of cesspools; a perfect fertiliser;  
no solids; no open filters; perfectly automatic; everything  
underground. State particulars.—WILLIAM BEATTIE, 8, Lower  
Grosvenor Place, Westminster.

**JAMES BACKHOUSE, F.L.S., F.R.H.S.,** for  
many years chairman of the late firm of James Backhouse and  
Son, Limited, having retired from York, offers his services as  
Garden Consultant. 30 years' experience, specially in connec-  
tion with Alpine and Herbaceous Plants. Advice given for  
Rock Garden construction and planting, also for permanent  
Flower Borders, boundary Plantations, etc. Address for terms  
to CAER FEGLA, Arthog, North Wales.

**LAXTON'S NEW SEED CATALOGUE,** con-  
taining Novelties for 1925, New Pea "Bedford Champion"  
and "Laxton's Progress," post free on application. Fruit  
Tree Catalogue and Cultural Hints can also be sent, post free,  
on request.—LAXTON BROTHERS, Nurserymen, Bedford.

**YORK STONE PAVINGS, crazy or rect-**  
angular, rustic copings, steps, roughly squared or random  
shaped, flat bedded wallstones, garden edging, rockery, etc.—  
SAMUEL JOHNSON AND SON, Quarry Owners, Mirfield, Yorkshire

**CHOICE NEW CHRYSANTHEMUMS.**—Our  
Catalogue of nearly 900 varieties, including Grand Novelties for  
1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready.  
Post free on application.—J. W. COLE AND SON, Chrysanthemum  
Specialists, Peterborough.

**PRIMULA, ALPINE AND PERENNIAL**  
Seeds, from large (1,500) collection, sold cheap. List free.  
REV. J. F. ANDERSON, Glenn Hall, Leicester.

**GARDEN NETS.**—Best tanned, small mesh,  
25yds. by 1yd., 2/-; 25yds. by 2yds., 4/-; 25yds. by 3yds., 6/-;  
25yds. by 4yds., 8/- Carr. paid. Satisfaction guaranteed.  
Tennis nets from 10/-. Special nets for tennis boundary. Pea  
training nets. Lists and samples free.—G. JARRETT, Net-  
maker, Rye.

**CANADIAN AND AMERICAN GLADIOLI.**—  
The best of the standard varieties and novelties.—J. W. CROW,  
Simcoe, Ontario, Canada

**TENNIS COURT FENCING.**—A speciality.  
Made up as complete enclosures, with standards, wire, and  
straining posts, from 6 ft. to 12 ft. high. Write to Dept. FP/G  
for particulars.—BOULTON AND PAUL, LTD., Norwich.

**SUTTON'S GOLD MEDAL GLADIOLI.**

Our choice selection of 36 Bulbs, in 12 showy varieties, s. d.  
adapted for masses or clumps .. .. 6 6  
50 in 10 choice varieties .. .. 10 6  
SUTTON AND SONS, THE KING'S SEEDSMEN, READING.

**DOBBIE'S 1925 CATALOGUE AND GUIDE,**  
136 pages, 194 illustrations. Free to all readers. Please mention  
THE GARDEN when writing.—DOBBIE & Co., LTD., Edinburgh.

**BATH'S SELECT SEEDS AND PLANTS.**—  
New Illustrated Catalogue of choice Vegetable and Flower Seeds  
and Plants is now ready, and will be sent post free on application.  
—(Dept. E), R. H. BATH, LTD., Floral Farms, Wistech.

**CHEAP GOVERNMENT WIRE !!! Great**  
for training fruit trees, peas, beans, hops, arches, greenhouses,  
tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-  
stranded and waterproof covered. Several thicknesses from 10/6  
per mile (full 1,760 yards). Postcard to-day for free samples and  
list of 300 bargains.—GREEN'S GOVERNMENT STORES, 69, Albert  
Street, Lytham.

**FIDLER'S NEW ILLUSTRATED GARDEN**  
SEED GUIDE AND CATALOGUE FOR 1925 IS NOW  
READY, and a copy will be sent post free to any address on  
receipt of a post card.—Write at once to FIDLER & SONS, Royal  
Berkshire Seed Stores, Reading.

**108 GLADIOLI for 8s. 9d. post paid.**—The  
most dazzlingly brilliant flowers on earth, with spikes of  
blooms 18ins. long; 12 each of 9 kinds (108 bulbs), all separately  
packed and named, for 8s. 9d., post paid; half lot, 4s. 9d.,  
post paid (cultural instructions and beautifully illustrated  
Flower and Vegetable Catalogues included).—J. KAY AND CO.,  
Goodmayes Road, Goodmayes, Essex.

**BEGONIAS AND GLOXINIAS.**—Kay's prize  
strain with blooms often measuring 8ins. across; a collection  
of 12 Single and 12 Double Begonias, also 6 Gloxinias—all  
separately packed and named, with cultural instructions and  
illustrated catalogues, for 6s. 3d., post paid; half lot, 3s. 6d.,  
post paid.—J. KAY AND CO., Goodmayes Road, Goodmayes,  
Essex.

**HEDGING PLANTS:**

PRIVET: Strong, English-grown, bushy and well rooted,  
30-36ins. .. .. at 13s. per 100  
36-40ins. .. .. at 15s. per 100  
QUICKTHORN: Extra bushy,  
24-30ins. .. .. at 10s. per 100,  
All Carriage Paid on 1,000 Lots. — HODSONS, Castlegate  
Nottingham.

**MICHAELMAS DAISIES.**—Pyrethrums and  
other hardy perennials. For new catalogue write to MRS.  
THORNELEY, Nursteed, Devizes.

**IMMEDIATE DESPATCH GUARANTEED**  
by ELLISONS of all orders placed now for Seeds, Bulbs, Scotch  
Seed Potatoes, Fertilisers, etc. 64 page Catalogue Calendar  
free. Shallots, 12lb., 5/-, carriage paid. Onion Sets, 1/3 lb.  
G. and A. Fertiliser, 5/- cwt. 3 each 15 choicest named large-  
flowered Gladioli, 5/-, carriage paid. Begonias, single, 1/6;  
double, 2/-.—ELLISONS, West Bromwich. Established 1890.

**LABELS TO LAST—AT LAST!**—You write  
by any nail point, on prepared (Patented) Metal, yet it cannot  
fade. Severely tested for years on inventor's Nurseries. The  
R.H.S., after long trial, award H.C. List of shapes free.  
Samples 2d.—WEBSTERS PATENTS Co., Witheridge, Devon.

**LOAM.**—Fibrous Yellow Turf Loam. Illus-  
trated Catalogue Free.—A. B. JOHNSTON, New Park, Cranleigh,  
Surrey.

**SHRUBS** are becoming more and more  
the fashion in gardening. "Shrubs for Amateurs," Mr. W. J.  
Bean's new book, is the best on the subject at a reasonable  
price. 5/- net. Published at the Offices of "COUNTRY LIFE,"  
LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**GREENHOUSE PAINTING AND GLAZING.**  
—"Vitrolite," superior to White Lead Paint, 18/6 per gallon,  
cans extra. "Plastine," the Imperishable Putty, 32/- per cwt.  
kegs extra; 7lb. tins, 4/- post free; 14lb. tins, 5/6 each, carriage  
extra, tins free.—Full particulars from W. CARSON & SONS  
Grove Works, Battersea, S.W.11.



## SPRING PLANTING

Conditions are now favourable for planting

FRUIT TREES, ROSES,  
ORNAMENTAL TREES &  
SHRUBS, HEDGE AND  
SHELTER PLANTS,  
ALPINES, & HARDY  
- - PERENNIALS - -

Immense Stock. Well Grown.  
True to Name. Highest Quality  
at Reasonable Prices.

DESCRIPTIVE CATALOGUE FREE  
Including Special Clearance Offers  
- - at Reduced Rates - -

THE  
**BARNHAM NURSERIES**  
BARNHAM, SUSSEX : LTD.

Please mention THE GARDEN when writing.

## SEED POTATOES

	Cwts.	56lbs.	28lbs.	14lbs.
May Queen -	16/-	9/-	5/-	2/9
Duke of York -	13/-	7/-	4/-	2/3
Midlothian Early -	13/-	7/-	4/-	2/3
Sharpe's Express -	11/-	7/-	4/-	2/3
Sir John Llewellyn -	12/-	7/-	4/-	2/3
Eclipse -	11/-	7/-	4/-	2/3
Sharpe's Victor -	16/-	9/-	5/-	2/9
Epicures -	14/-	8/-	5/-	2/9
British Queen -	11/-	7/-	4/-	2/3
Immune Ashleaf -	14/-	8/-	4/-	2/-
Edzell Blue -	18/-	10/-	5/-	2/6
King Edwards -	9/-	5/-	3/-	1/6
Rhodoric Dhu -	14/-	7/-	4/-	2/-
Ally -	16/-	8/-	4/-	2/-
Great Scot -	14/-	7/-	4/-	2/-
Kerr's Pink -	14/-	7/-	4/-	2/-
Majestic -	14/-	7/-	4/-	2/-
Tinwald Perfection -	12/-	6/-	3/6	2/-
Golden Wonder -	12/-	7/-	4/-	2/-
Arran Victory -	18/-	10/-	5/-	2/6
Arran Chief -	11/-	7/-	4/-	2/6

Sacks free Free on Rail Cash with order  
SEND FOR LIST OF OTHER VARIETIES

**J. W. CROSS POTATO GROWER** Elm Road,  
**WISBECH.**

Please mention THE GARDEN when writing.

## OFFER OF ENGLISH YEWS

EACH TREE A SPECIMEN

In the following sizes:

4½—5ft. 3½—4ft. 2½—3ft.

Order now and have the  
BEST TREES RESERVED

Write for Prices to

**GEO. G. WHITELEGG**

THE NURSERIES

CHISLEHURST :: KENT

Please mention THE GARDEN when writing.

## 38th YEAR

# MRS. PYM'S FAMOUS PLANTS AT REDUCED PRICES

4d. extra for orders under 3/-. 4/- worth gratis plants  
with every 20/- order. Small orders are sent post free,  
parcel post; large orders carriage paid, passenger  
train. Named, carefully packed and guaranteed to arrive  
in excellent condition. Cash with order. Stock your  
gardens with really excellent plants

Strong, choice, hardy transplanted perennials for  
flowering this year, for borders, beds, rockery, etc. Price  
per dozen; half and quarter dozen, same rate.

**Achillea**, double white, 3/6. **Achillea**, Cerise Queen, 4/6.  
**Agrostemma**, bright crimson, 2/6. **Alyssum** Gold Dust,  
3/-. **Alyssum** alpine, 5/-. **Alpine** Lychnis, crimson,  
3/-. **Alpine** Pinks, creeping, white or pink, 4/-; mixed,  
2/-. **Alpine** Wallflowers, orange, yellow or mauve, 1/-.  
**Anchusa**, large blue, tall, 4/-. **Anthemis** Kelwayi, golden,  
3/-. **Anemone** japonica, white or  
pink, 6/-. **Aquilegia**, long-spurred, new art shades, 3/-;  
long-spurred, yellow, 3/6; double and single hybrids, 2/6.  
**Arabis**, double white, 3/-. **Alpine** Aster, rockery, blue,  
mauve or lilac, 6/-. **Aster** Michaelmas Daisy, best new  
large-flowering, named, all colours, 6/-. **Aubrietia**, rich  
purple, 2/6; new large-flowering hybrids, 3/6. **Auricula**  
alpina, superb varieties, 4/-. **Brompton** Stocks, giant  
scarlet and mixed, 2/6. **Campanulas**, tall varieties, blue,  
white or mauve, 5/-; dwarf blue or white for rockeries, 6/-.  
**Campanula** pyramidalis (Chimney Bell-flower), blue or white,  
2 years, 6/-. **Canterbury Bells**, single blue, white, pink,  
mauve, 1/6; double, 2/6; Dean's hybrids, 1/9. **Candytuft**,  
perennial, white or lilac, 4/-. **Carnation**, best double border,  
scarlet, crimson, white, yellow grounds, 4/-; mixed colours,  
3/-. **Centaurea** montana, large fringed blue, mauve, rose,  
white, 3/-. **Cheiranthus**, yellow, orange, mauve, 1/-.  
**Chelone** (Lobster Flower), 4/-. **Chrysanthemums**, mixed  
double and single, 2/9. **Chrysanthemum** maximum (Giant  
Moon Daisies), new named sorts, 2/6. **Chinese** Pinks, 2/-.  
**Cistus** Rock, charming for rockeries, trails of lovely coloured  
flowers 2/6. **Coreopsis** grandiflora, 3/-. **Cornflowers**,  
Kelway's double blue, 1/6. **Hardy** Cyclamen, lovely for  
rockeries, etc., large bulbs, 3/-. **Daisies**, new bedding variety,  
intensely double, enormous blooms, pink, white or crimson,  
1/4; mixed, 1/-. **Delphiniums**, beautiful hybrids from best  
named sorts, 2 year old, 9/-; 1 year, 6/-. **Dianthus**, splendid  
for bedding, double or single, all colours, 2/-. **Dianthus**, for  
rockeries, 2/6. **Echinacea**, new red Rudbeckia, 6/-. **Erigeron**,  
(Mauve Marguerite), 3/6; Quakeress, 6/-. **Erysimum**, rockery,  
Golden Gem, 1/-. **Forget-me-Not**, best dwarf, light or  
dark blue, 1/-. **Foxgloves**, large mixed pink, etc., 1/6;  
white, 2/-; new yellow, rare, 4/-. **French** Honeysuckle,  
red, 4/-. **Fuchsia**, hardy crimson, 4/6. **Funkia** (Corfu  
Lily), 6/-. **Galetia**, handsome, white Spire Lily, 6/-.  
**Geum** Mrs. Bradshaw, 8/-. **Geum** Glory, fine double scarlet,  
6/-. **Geum** coccineum, improved scarlet, semi-double, 4/-.  
**Gaillardia** grandiflora, new large hybrids, 3/-. **Gladiolus**,  
best large-flowering, large bulbs, 1/9. **Gypsophila** paniculata,  
well known favourite, 6/-. **Hemerocallis**, grand large-flowering  
hardy Japanese Lily, orange scarlet, yellow and tawny, large  
roots, double 8/-; single, 5/-. **Hollyhocks**, Kelway's, double,  
4/-; single, all shades of colour, 3/-. **Honesty**, 1/9. **Iceland**  
**Poppies**, new large-flowering Excelsior strain, 3/6. **Indian**  
**Pinks**, lovely colour, 2/-. **Iris**, large flag, white, mauve,  
yellow, blue, purple, large blooms, 6/-. **Isatis** (Woad), rare,  
3/-. **Lavender**, 2 year old bushes, 6/-. **Lily of the Valley**,  
large flowering crowns, 3/-. **Linum** perenne (Blue Fairy Flax),  
3/-. **Lupin** polyphyllus, blue, white, pink, large spikes, 2/6.  
**Tree** Lupins, new Golden Queen, Snow Queen and grand new  
hybrids in mauve shades, will grow 9 feet and covered with  
fragrant bloom, 6/-. **Lychnis** chalcidonica, scarlet or salmon,  
5/-. **Malva** bright pink, musk-scented, 3/-. **Montbretia**,  
new, named, large-flowering sorts, 1/9. **Pansies**, bedding  
varieties, all colours, separate or mixed, also best giant named  
varieties, 1/4. **Papaver** Oriental Queen, enormous blooms,  
4/-. **Pentstemon**, best large-flowering, 4/-. **Periwinkle**,  
large blue, 4/-. **Peas**, Everlasting, red, pink or white, 6/-.  
**Phlox**, best large-flowering, separate colours, 6/-; mixed, 5/-.  
**Pinks**, fragrant Pheasant-eye, double, semi-double and single,  
all colours, splendid for cutting, 2/-; sweetly scented, old-  
fashioned double white, 3/-. **Polyanthus**, Kelway's choice  
mixed, 2/-. **Potentilla**, double crimson, etc., 4/-. **Paeonies**,  
old favourite, enormous crimson and pink double blooms, large  
roots, 12/-. **Paeonies**, mixed colours, large roots, 8/-.  
**Primulas**, charming hardy varieties for borders, rockeries,  
waterside, pots, etc., 6/-. **Pyrethrum**, beautiful hybrids, 4/-.  
**Rose** Campion, 2/6. **Rock** Roses, 4/-. **Rock** Wallflowers,

1/4. **Sweet Rocket**, white or mauve, 2/-. **Rosemary** bushes,  
7/-. **Rudbeckia**, Newmanii speciosa, 6/-. **Saponaria**,  
ocymoides, trailing pink flowers, 3/-. **Saxifrage**, mossy,  
assorted, 5/-. **Sunflower**, perennial, Mrs. Mellish, etc., 3/-.  
**Sweet Scabious**, lovely colours, 3/-. **Scabiosa** caucasica,  
exquisite mauve, 6/-. **Silene** pendula, pink, 1/6. **Silene**  
Schafta, rockery perennial, pink, 6/-. **Siberian** Wallflowers,  
1/-. **Solomon's Seal**, for shady places, 3/-. **Stachys** lanata  
(Lamb's Wool), 3/-. **Statice** latifolia, tall lavender blue, 4/-.  
**Sweet William**, Kelway's new Scarlet Beauty, Pink Beauty  
Crimson Beauty, 2/6; Dobbie's superb auricula-eyed and  
double and single hybrids, 1/6. **Thalictrum**, hardy Maiden  
hair, 6/-. **Thrift**, pink flowering, compact growth, 2/6. **Hardy**  
**Tiger Lilies**, large, orange-red, black spots, 5/-. **Tritoma** (Red  
Hot Poker), 6/-. **Tussilago** (hardy winter Heliotrope), 4/-.  
**Tunica** Saxifraga, rockery or edging, 3/-. **Valerian**, old  
favourite, thrive anywhere, crimson or pink, 3/-. **Verbascum**  
large, tall, golden-yellow, 4/6. **Veronica** spicata, tall blue  
4/-; gentianoides, dwarf blue, 5/-. **Viola** cornuta, splendid  
for rockeries or border, Purple or Mauve Queen, Blue Perfection  
Champion White, 1/9. **Bedding** Violas, Bath's Yellow Gem,  
Purple King, Imperial Blue, Snow Queen, 1/6. **Violas**, Maggi  
Mott, best, large mauve, strong rooted cuttings, 2/- per doz.  
half and quarter doz. same rate. **Wallflowers**, all colours, 9d.

**STRONG TRANSPLANTED PLANTS FOR COOL**  
**GREENHOUSE, &c.** Per dozen, half and quarter dozen  
same rate. **Agapanthus** (Blue African Lily), 6/-. **Agathe**  
(Blue Cape Aster), 4/-. **Aralia** (Fig Palm), 4/6. **Arum** Lily  
1 year, 6/-. **Asparagus** Fern, trailing or erect, 6/-. **Bella**  
**donna** Lilies, large fragrant pink blooms, flowering bulbs, 9/-  
**Cannas**, Crozy's hybrids, 6/-. **Celsia** cretica, charming bright  
yellow and purple, 4/-. **Cinerarias**, exhibition strain, 3/-  
**Cyclamen**, very choice strain, 6/-. **Francoa** (Bridal Wreath)  
5/-. **Fuchsia**, choice varieties, 4/-. **Heliotrope**, large fragrant  
6/-. **Hydrangea**, best pink or white flowering, strong year  
old rooted cuttings, 1/4 each. **Nicotiana**, white or crimson  
(Tobacco), 3/-. **Passion Flower**, 8/-. **Plumbago**, blue  
1/4 each. **Primula** obconica, new giant crimson and rose  
shades, 6/-. **Primula** malacoides, favourite lilac, 4/-; kewensis  
yellow, 4/-. **Rehmannia**, pink trumpet, 4/-. **Spiræas**, have  
some tall pink plumes, flowering roots, 10/-. **Streptocarpus**  
magnificent new large-flowering hybrids, lovely colours, 6/-  
Many others. Catalogue free.

**STRONG HARDY CLIMBERS.**—**Pyrus** japonica, de-  
scarlet, handsome flowers for months, 3 years, 2/- each.  
**Ampelopsis** Veitchii, self clinging, large 3 year old, 2/- each.  
2 year, 1/- each. **Bignonia** radicans, large red trumpet  
flower, 3 years, 2/- each. **Clematis** graveolens, yellow, scented  
3 years, 2/6 each. **Clematis** Viticella, purple, 3 years, 2/6 each.  
**Clematis** Vitalba (Traveller's Joy), white, almond-scented  
2 years, 2/- each. **Clematis** Flammula, fragrant, white (Virgin  
Bower) 2 years, 2/- each. **Eccelemocarpus** (Chilian Glo-  
suckle), clusters orange-red flowers, 1 year, 2 for 1/6. **Honeysuckle**,  
very fine, large, 2/- each.

**STRONG, HARDY, CHOICE FLOWERING SHRUBS.**  
**Calycanthus**, sweet-scented Anemone Tree, 1 year old, 1/-  
each. **Caryopteris**, blue spiræa shrub, 3 years, 1/9 each.  
**Deutzia**, double white or pink, 2 years, 1/6 each. **Forsythia**  
covered in early spring with masses golden bells, 3 years, 2/-  
each. **Ceanothus** azureus, lovely bright blue tea plant, 3 years,  
2/6 each. **Maidenhair Tree**, graceful foliage, small 1 year  
1/6 each. **Hydrangea** paniculata grandiflora, enormous head  
ivory white bloom, 2 years, 1/4 each. **Ribes**, blood red flow-  
ing currant shrub, 2 years, 1/6 each. **Syringa**, fragrant mauve  
orange, lovely white blooms, 3 years, 2/- each. **Sweet Briar**,  
2 year bushes, 2/6 each. **Spiræa** Shrub, pink or red, 3 years,  
1/9 each. **Guelder Rose** (Snowball Tree), 3 years, 1/6 each.  
**Pyrus** japonica, rich red flowers for months, 3 years, 2/6 each.  
**Weigelia**, beautiful pink or crimson flowering shrub, m  
of bloom all spring and autumn, 2 years, 2/- each.

Many more. Send for New Catalogue, free on application.  
Magnificent Hardy Perennials, Rockery Plants, Spring  
Bedding Plants, Greenhouse Plants. Herb Plants,  
Hardy Climbers, etc.

**MRS. PYM, F.R.H.S.**

10, VINE HOUSE, WOODSTON, PETERBOROUGH

Please mention THE GARDEN when writing.



# BEDALE ROSES, FRUITS AND HARDY PLANTS

Full descriptions in Catalogue, Free on Request. Mention "The Garden."

**12 GIANT ORIENTAL POPPIES** for 7/6  
 Duplex, light scarlet, nearly full double; Joan Pybus, salmon-pink; Joyce, rich cerise shade; King George, scarlet, fringed; Mrs. Harkness, apricot-salmon; Mrs. Perry, salmon; Nancy, large deep crimson; Perry's White, pure white; Princess Ena (the Tulip Poppy); Princess Victoria Louise, rose-salmon; Rembrandt, brilliant scarlet; William of Orange, pretty light orange.

**12 Giant-flowered Delphiniums.** All named, choice varieties, 18/-

**2 NEW ORIENTAL POPPIES**  
 Ethel Swete, brilliant rich cerise, distinct from all other shades. Received Award of Merit from R.H.S., London. 1/6 each; 15/- doz.  
 Mrs. H. G. Stobart, brilliant cerise-pink, charming, good habit; both are vigorous growers. 1/6 each; 15/- doz.

**Special Offer.**—3 of each for 7/6. Carriage paid for cash with order.

**12 Giant-flowered Delphiniums.** Extra choice, best varieties, 30/-

**G. GIBSON & CO., LEEMING BAR, BEDALE**

Please mention THE GARDEN when writing.

## OUR "POPULAR" COLLECTION

CONSISTING OF 18 BUSH ROSE TREES. FIRST CLASS VARIETIES FOR GARDEN EFFECT. ALL BRITISH GROWN

Admiral Ward	Lady Pirrie	Mrs. Henry Morse
Augustus Hartmann	Lamia	Mrs. Wemyss Quinn
Gruss an Teplitz	Madame A. Chatenay	Pharisäer
Henrietta	Madame E. Herriot	Red Letter Day
Independence Day	Margaret D. Hamill	Souvenir de Madame Boulet
Lady Ashtown	Miss C. E. Van Rossem	Mrs. John Laing

This Collection, carriage and packing free for 18/6 Cash with order

BUY HOME GROWN TREES

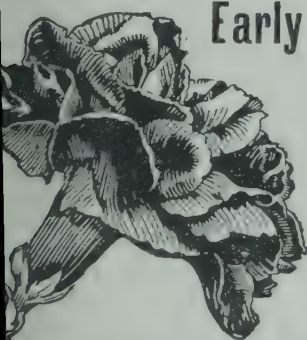
Catalogue of Rose Trees, Fruit Trees, Shrubs, etc., free on application to

**H. MERRYWEATHER & SONS, LTD.**

The Nurseries . Southwell . Notts.

Please mention THE GARDEN when writing.

## ant CARNATIONS & ALLWOODII



Early

for Best Results this year.

CATALOGUE of all Carnations for Garden and Greenhouse, also NEW COLOURS in Allwoodii, post free on request.

Special Collections at Carriage and Packing Paid prices:—

**HARDY PERPETUAL BORDER CARNATIONS**

6 Plants, Distinct Varieties	15/-
12 " " "	27/6
<b>ALLWOODII (Half Carnation, Half Pink)</b>	
6 Plants, Distinct Varieties	6/6
12 " " "	12/-
25 " " "	22/6
6 Novelties	15/-

**CARNATION PERFUME.**

**ALLWOOD BROS.** new and unique CARNATION PERFUME is stocked by leading Chemists at 1/6, 3/6, 5/-, 8/-, 10/-, and 15/- per bottle, or, in case of difficulty in procuring, direct from

The leading Carnation Specialists in the World.

Dept. 4, Haywards Heath, Sussex.

Please mention THE GARDEN when writing.

## THE ROSE

The most beautiful flower in all the world, with the delicate softness and symmetry of its petals, its gorgeous hues and tones—creates an atmosphere of delightful rest and seclusion in any garden.

The King's Acre Nurseries—famous since 1785 for the stamina and vigour of its roses—have hardy and reliable

## STANDARDS BUSHES and RAMBLERS

in a wonderful, almost endless, variety, which they are offering at prices considered by experts and amateurs to be beyond competition

**The King's Acre Nurseries**

LIMITED HEREFORD

Estab. 1785. Awarded 86 Gold Medals

Alphabetically arranged catalogue free on request

Please mention THE GARDEN when writing.

## BATH'S Gold Medal GLADIOLI.

The new large-flowered hybrid Gladioli offered below are a great advance on the older sorts, being very vigorous, and producing long spikes of large flowers in gorgeous colours.

	Per Doz.	Per 100
<b>BRILLIANT.</b> —Dazzling scarlet with a darker throat; strong healthy grower	23	16/-
<b>CHRIS.</b> —Dark maroon, shaded purple; very large flower, strong grower	3/-	21/-
<b>CLEAR EYE.</b> —Brilliant scarlet with pure white blotch, wide open flowers	10d.	9/-
<b>JACOB VAN BEIEREN.</b> —Beautiful violet self; tall spikes	1/-	11/-
<b>KING GEORGE.</b> —Dark scarlet crimson flowers, with white blotch. Magnificent spike	1/2	12 6
<b>LA COURONNE.</b> —Creamy white, flaming crimson blotch, splendid spike	2/-	22 -
<b>LADY HOWARD DE WALDEN.</b> —Clear yellow, large dark crimson blotch; a striking colour. Early	1/-	11/-
<b>LENE GRATZ.</b> —Flower pure white, large and of great substance, strong grower	4/-	28 -
<b>LOHENGRIN.</b> —Marble white, tinted pink as the flowers age; of tremendous size	2/-	22 -
<b>MAGNOLIA.</b> —Flowers pure white, of enormous size, petals broad, rounded like a Magnolia	1 6	16 6
<b>MEILUST.</b> —Pink with dark red blotch; very large flower and spike	6 -	40 -
<b>MME. MOUNET SULLY.</b> —Pure white with large brilliant scarlet blotch; long spike; lovely variety	1 6	16 6
<b>ODIN.</b> —Pure salmon-orange with a darker blotch very large flower and spike	2 3	16 -
<b>ORANGE QUEEN.</b> —A lovely orange yellow, distinct and beautiful	1 3	14 -
<b>PINK PERFECTION.</b> —Delicate apple blossom pink, feathered rose; very vigorous; late	2 9	18 -
<b>RED EMPEROR.</b> —Glowing scarlet red, enormous flowers	3 6	22 -
<b>ROSE PRECOCE.</b> —Beautiful rose, feathered pink; enormous spikes; tall	1/-	10 6
<b>RUBINI.</b> —Brilliant orange scarlet, white blotch, very large flowers; very early	3 6	25 -
<b>TRUDEL GROTZ.</b> —Salmon pink, dark red blotch; very large flower	1 6	16 6
<b>WHITE GIANT.</b> —Pure white; flowers of enormous size and great substance	2 -	14/-

One each of the above 20 varieties for 16/6; 3 of each for 47/- Carriage paid.

## PRIMULINUS HYBRIDS.

The New Primulinus varieties have smaller bulbs and flowers but are most vigorous growers. The flowers are delightfully light and graceful, and the colours charming.

	Per Doz.	Per 100
<b>ALTAIR.</b> —Rich salmon saffron; lovely colour; tall	1/-	11/-
<b>ANAMOSA.</b> —Shrimp-pink with paler centre; tall plant; extra	1/-	11/-
<b>ASIA.</b> —Rich cerise, inside silvery rose, a lovely variety	1 6	16 6
<b>ATALANTA.</b> —Salmon-orange, golden blotch on lower petals; long wiry stem	1 8	10 6
<b>ATTALIA.</b> —Brilliant orange-scarlet; tall, slender stems; very free	10d.	9/-
<b>ELBERTON.</b> —Deep creamy yellow, almost a self colour; extra fine	1/-	11/-
<b>GOLD ELSE.</b> —Sulphur yellow tinged apricot; large flower; tall; very early	2 3	16 -
<b>HERMIONE.</b> —Dazzling orange-salmon, on pure yellow ground	1 6	10 6
<b>HESPERIA.</b> —Vivid salmon; large flowers, good spike	2 3	16 -
<b>LATONIA.</b> —Pale salmon-pink and orange-carmine; very early	3/-	21 -
<b>MAIDEN'S BLUSH.</b> —Beautiful delicate pink; flowers on tall slender stems	1 9	12 6
<b>MYRA.</b> —Deep salmon, yellow ground; an exquisite variety	1/-	11/-
<b>NIOBE.</b> —Bright orange, a lovely colour	2 3	16 -
<b>ORANGE BRILLIANT.</b> —Brilliant orange flowers on long wiry stems; superb	2 3	16 -
<b>PSYCHE.</b> —Fiery orange-red, velvet red blotch; free	3/-	21 -
<b>ROSAURA.</b> —Rich carmine pink, tinted old rose; distinct and pleasing	3 6	25 -
<b>SCARLETTA.</b> —Dazzling scarlet, a lovely decorative variety	3 -	22 6
<b>SOUVENIR.</b> —Very rich clear yellow; the best deep yellow Primulinus	2 -	14
<b>VANESSA.</b> —Fine salmon-orange; flowers of the highest quality; very fine for garden or cutting	1 9	12 6

One each of the above 19 varieties for 9 6; 3 of each for 27/- Carriage paid.

Complete Illustrated Catalogue of Gladioli, Select Seeds and Plants post free on application.

**R. H. BATH, LTD.,**  
 The Floral Farms, WISBECH.

Please mention THE GARDEN when writing.



# WAKELEY'S *Celebrated* Hop Manure

(PATENTED)  
THE ORIGINAL AND ONLY  
RELIABLE SUBSTITUTE FOR STABLE MANURE

DIPLOMA AND MEDAL, ROYAL INTERNATIONAL HORTICULTURAL EXHIBITION, 1912

## DO YOU REALISE IT?

A large bag of WAKELEY'S PATENTED HOP MANURE at a cost of only 7/- carriage paid to your door (if within 25 miles radius of London, or at a trifling extra if beyond), GOES AS FAR AS A CART-LOAD OF STABLE MANURE, without any of the defects of the latter; gives better results, is easy and clean to use.

Every ounce of Wakeley's Hop Manure is of value to the soil, supplying the necessary HUMUS in addition to the valuable plant food. Worthless rubbish is not added to make weight (as is the case of some artificial manures advertised).

Thousands do realise it, the proof of this is the constant flow of UNSOLICITED LETTERS received from time to time in praise of the wonderful results obtained at such a moderate cost (see Booklet for selection).

BEWARE OF IMITATIONS.—Genuine  
Only in Our Marked Bags contain-  
ing Guaranteed Analysis

A BEAUTIFUL FREE BOOKLET giving  
full particulars and testimonials  
sent on receipt of postcard

**WAKELEY BROS. & CO., LTD.**  
75a, BANKSIDE, LONDON, S.E.1



### CASH PRICES (including bags) :

Small (about 1 bushel) ...	3/-
Large (about 4 bushels) ...	7/-
5 Large ...	33/9
10 Large ...	65/-
20 Large ...	120/-

Carriage paid by Pickford's or to any station within 25 miles of London, including delivery if within free delivery radius of Railway Company; 6d. per bag extra for every 50 miles or part beyond. Maximum extra charge Great Britain, 2/6 per bag.

## WATTS' POLYANTHUS-PRIMROSES ::

1st Class Certificate Nat. Prim. Society

YELLOW - - - - -	per pkt.	1/-	2/6
YELLOW and WHITE - - -	"	1/-	2/6
WHITE - - - - -	"	1/-	2/6
RED, CRIMSON and DARK - -	"	1/-	2/6
MIXED - - - - -	"	1/-	2/6
BLUE and VIOLET - - -	"		5/-

The Welsh Bulb Fields :: St. Asaph

Please mention THE GARDEN when writing.

## Michaelmas Daisies

For all the latest and most beautiful varieties see the Raiser's List.

**ERNEST BALLARD, Colwall, MALVERN**

Please mention THE GARDEN when writing.

### TREE SEEDS

Large collection of Evergreen, Tree, Shrub, and Hardy Perennial Seeds from all parts of the world

SEND FOR CATALOGUE

**CONYERS B. FLEU, JR.**

6628-30-32 Ross Street

GERMANTOWN :: PHILADELPHIA, U.S.A.

Please mention THE GARDEN when writing.

### The Glen Road Iris Gardens

SPECIALIZE IN RARE AND FINE  
VARIETIES OF BEARDED IRISES

Send for List

**Grace Sturtevant, Prop.**

Wellesley Farms . Massachusetts . U.S.A.

Please mention THE GARDEN when writing.

## WM. ARTINDALE & SON, NURSERYMEN — SHEFFIELD

Winners of the

SIR ALBERT STEPHENSON SILVER CUP AT THE  
SOUTHPORT FLORAL FETE FOR GLADIOLI

—CATALOGUES ON APPLICATION—

## SEEDS McHATTIES' SEEDS

EXHIBITION SPECIALITIES

MASTERPIEC ONION - - -	per pkt., 6d. & 1/-
IMMENSELY RUNNER BEAN - -	per pint, 2/6
IMPERIAL EXHIBITION BROAD BEAN, per pint 1/-	

The above are a few of our Scotch Strain for Show purposes. WRITE FOR LIST, post free.

**McHATTIE & CO. Scotch Seed House, CHESTER**

## VIOLETS FOR BEDS, ROCK GARDENS AND NATURALIZING.

**MISS STANISTREET** can supply now healthy young plants, properly selected and packed by an expert, from her Unique Collection of over 50 Varieties.

: : Descriptive List Free. : :

**KILLALOE, CO. CLARE.**

Try our "Marvel" Collection of dependable seeds for a 300 yards' plot, carriage paid for 5/- Potatoes excluded! Catalogue included!

**UPSTONES, Seed Experts, ROTHERHAM**

## FERTILISERS.

LAWNS, 20/-; FRUIT TREES, VINES, 19/6;

GENERAL GARDEN USE, 17/-;

WORM KILLER, newly introduced, 19/-

Per cwt., carriage paid. Also all other fertilisers.

**HY. RICHARDSON & CO.,**

Skeldergate Bridge Works, YORK

## CHRYSANTHEMUMS

We are fully equipped to supply your wants in really first class stock of choicest Chrysanthemums and Perpetual-Flowering Carnations.

Write for our General Catalogue or Novelty List, with useful cultural hints included.

**KEITH LUXFORD & CO.**  
Sheering Nurseries, HARLOW, ESSEX  
and at Sawbridgeworth, Herts.

## Reliable Lincolnshire Seed Potatoes

Specialty Selected Stocks.—Sharpe's Express, Eclipse, Sir John Llewellyn, British Queen, King Edward's, Queen Mary, Ally and Majestic. Large or small quantities

—When writing please state quantity required to—

**W. DENNIS & SONS, LTD.**  
(Dept. No. 12), KIRTON, BOSTON, Lincs

## HERBERT'S GOLD MEDAL PINKS

Acknowledged to be the finest in the World. Unsurpassed for border or pot culture, of robust constitution, free flowering, unique colouring, and delightful fragrance.

Received Ten Awards of Merit.

Lists Free.

**C. H. HERBERT, Nurseries, Hazelwood Road, Acock's Green, BIRMINGHAM**

## STORRIE'S Unique and Descriptive Catalogue of Seeds, Tiny Seedlings and Bushy

Transplanted Plants is now ready. If you have not yet received a copy a Postcard will bring you one.

**STORRIE & STORRIE, The Specialists, Glencarse, PERTSHIRE.**

## CAULIFLOWER

"MAY QUEEN"

The fastest growing, quickest heading variety in existence. Planted in March, large white heads may be cut during May and June. Plants, ready now, 3/6 for 100; 500 for 16/-; 1,000 for 30/-. Carr. paid. Packed in boxes, with cultural hints.

**DANIELS & SON, WYMONDHAM, NORFOLK.**



# KING'S ACRE

SELECTED VEGETABLE & FLOWER SEEDS  
of the FINEST STRAINS & TESTED GROWTH

CRANSTON'S EXCELSIOR & AILSA CRAIG, the FINEST ONIONS  
IN COMMERCE. SEALED PACKETS, 1/3, 1/9 and 2/9 POST FREE

NEW ILLUSTRATED SEED CATALOGUE FOR 1925

POST FREE ON APPLICATION

## KING'S ACRE NURSERIES

LATE CRANSTON'S  
Established  
1785

LTD.  
HEREFORD

SEED MERCHANTS  
Awarded 87  
Gold Medals

Please mention THE GARDEN when writing.

## BEGONIAS

In superb quality and extra large tubers for Greenhouse or Bedding.

DOUBLES, in 8 colours, flowers like large Roses and Camellias .. ..	6/- per doz. ..	42/- per 100
DOUBLES, in mixed colours .. ..	5/- ..	35/- ..
SINGLES, in 6 colours, very large fine shaped flowers .. ..	4/6 ..	30/- ..
SINGLES, in mixed colours .. ..	3/6 ..	24/- ..
SINGLES, frilled or crested, in 6 colours .. ..	5/- ..	35/- ..
SINGLES, frilled or crested, in mixed colours .. ..	4/- ..	28/- ..

Collections of 36 large tubers, 12 doubles, 12 singles, 12 frilled singles, 14/-

Post free on orders of 15/- and over.

Send for FREE Catalogue of named Double Begonias for Exhibition, Basket varieties, Cyclamen, Carnations, Delphiniums, Gloxinias, Polyanthus, etc.

## DELPHINIUMS

The ONLY collection to receive in 1924, the R.H.S. Gold Medal, the highest award obtainable.

Plant NOW. We have pleasure in offering the following Collections which are specially good value, in strong ground roots, which will make a fine show of bloom this year.

Collection A, 12 extra good sorts .. ..	65/-	Collection C, 12 fine sorts .. ..	30/-
„ B, 12 very choice sorts .. ..	42/-	„ D, 12 good sorts .. ..	22/-
Collection E, 12 average sorts .. ..	15/-		

Catalogue FREE. Apply

BLACKMORE & LANGDON :: BATH

Please mention THE GARDEN when writing.

## May We Send You Our Catalogue of Scotch Seed Potatoes?

OUR stocks are all Class 1 Scotch, specially grown and selected for seed purposes, and under normal conditions of soil and situation, cannot fail to produce large crops. All best varieties stocked including ARRAN ROSE, IMMUNE ASHLEAF, DUKE OF YORK, SHARPE'S EXPRESS, WITCH HILL EARLY, ALLY, ARRAN COMRADE, BRITISH QUEEN, GREAT SCOT, KING GEORGE, ABUNDANCE, ARRAN CHIEF, KERR'S PINK, KING EDWARD, MAJESTIC, and TINWALD PERFECTION.

CATALOGUES FREE.

AUSTIN & McASLAN,

The Premier Scottish Seedsmen since 1717.

39, Mitchell St., GLASGOW, C.1.

Please mention THE GARDEN when writing.

## Items of Interest from New Malden

OUR new list of Herbaceous Plants is now ready and will be sent free on application. It also contains the cheaper Annuals for early Spring planting. Our Collections, as offered below, contain varieties to give bloom during the entire season, and are rapidly becoming great favourites with Amateurs who find it difficult to make a suitable selection.

### COLLECTIONS OF HARDY BORDER PLANTS.

- Collection A.—12 Hardy Border Plants, in 12 varieties, our selection, 6/6.  
Collection B.—25 Hardy Border Plants, in 25 varieties, our selection, 12/6.  
Collection C.—50 Hardy Border Plants, in 25 varieties, our selection, 24/-.  
Collection D.—100 Hardy Border Plants, in 50 varieties, our selection, 42/-.

HAMPTON PLANT CO.,  
7, New Malden, SURREY.

'Phone: MALDEN 330.

Bankers: Barclays.

Please mention THE GARDEN when writing.

## SYDENHAM'S GLADIOLI

Every Garden, however small, should contain some Gladioli. They are easily grown, most attractive and strongly recommended for cutting, especially the Primulinus Varieties.

The following are the Best and most  
Popular Varieties at  
MODERATE PRICES

	Doz.	100
America, beautiful shell-pink ..	1/9	12/6
Baron Hulot, fine true blue ..	2/3	16/-
Blue Bird, fine light violet-blue ..	4/6	32/-
Brenchleyensis, well known scarlet ..	1/9	12/6
Brimstone, pale primrose ..	2/3	16/-
Corry, pale blue ..	2/6	18/-
Empress of India, velvety maroon ..	2/-	14/6
Enchantress, pretty lilac-blue ..	3/-	21/-
Fairy King, fine vermilion-scarlet ..	3/6	25/-
Flora, choice chrome yellow ..	2/3	16/-
General de Wet, lovely apricot-rose ..	5/-	36/-
Golden West, orange-red and gold ..	2/3	16/-
Halley, charming salmon-pink ..	1/6	10/6
Hilda, bright blood-red self ..	2/3	16/-
King of Scarlets, finest scarlet ..	2/6	18/-
L'Immaculee, pure white ..	2/-	14/6
Loveliness, refined buff on cream ..	2/3	16/-
Marechal Foch, large pale pink ..	1/6	10/6
Mrs. F. Pendleton, pink with crim- son blotch ..	2/3	16/-
Niagara, rich buff-yellow ..	2/3	16/-
Odin, rich deep salmon ..	2/3	16/-
Panama, charming rose self ..	2/-	14/6
Pink Beauty, bright rosy pink ..	1/9	12/6
Pink Perfection, soft rose-pink ..	2/3	16/-
Prince of Wales, fine salmon-pink ..	1/9	12/6
Princess, large, open scarlet ..	2/-	14/6
Proserpine, lovely bright rose ..	3/-	21/-
Red Emperor, rich blood-red ..	2/6	18/-
Schwaben, popular yellow self ..	1/9	12/6
Venus, pale pink on buff ..	3/-	21/-
White Giant, finest white, large ..	2/6	18/-
Wilbrink, flesh-pink ..	1/6	10/6
Willie Wigman, pale rose-tinted cream ..	1/6	10/6
Yellow Hammer, deep yellow self ..	1/9	12/6
Mixture of Candavensis Hybrids ..	1/9	12/6
„ Childsii Hybrids ..	1/6	10/6
„ Nanceanus Hybrids ..	1/6	10/6
„ Lemoines Hybrids ..	1/6	10/6

### PRIMULINUS HYBRIDS

Atalanta, salmon-orange ..	1/9	12/6
Hermoine, beautiful soft salmon ..	1/9	12/6
Hesperia, bright orange-cerise ..	2/-	14/6
Maiden's Blush, pale coral-pink ..	1/9	12/6
Niobe, orange shaded carmine ..	2/3	16/-
Psyche, charming soft orange ..	2/3	16/-
Scarletta, finest scarlet self ..	4/-	30/-
Souvenir, fine rich yellow ..	2/3	16/-
Thecla, pale primrose ..	1/6	10/6
Vanessa, salmon-orange with lilac blotch ..	1/6	10/6
Yellow Queen, deep yellow self ..	2/-	14/6

SEND FOR

THEIR UNIQUE LISTS

Post Free on Application to

ROBERT SYDENHAM  
LIMITED

99, Tenby Street, BIRMINGHAM

NO ONE WILL SERVE YOU BETTER

Please mention THE GARDEN when writing.



## GLORIOUS GLADIOLI

No garden is complete without these Lovely Flowers, and for house decoration they have few equals.

### THREE SPECIAL LINES

Mixed colours, 2nd size. Per 100, 5/-; 500 for 22/6  
 " " 1st size. " " 7/6; " " 35 -  
 " " Top size, " " 10/-; " " 47/6  
*Carriage paid. Immediate despatch.*

Primulinus Varieties, Splendid Mixture,  
 Per 100, 5/- & 7/6; Extra Choice, 10/-.  
 Ask for special list and compare our Prices.

**LONGSTAFF & SONS, F.R.H.S.,**  
 Near CHELSFIELD STATION, KENT

*Please mention THE GARDEN when writing.*

## CHEAL'S DAHLIAS

UNIQUE COLLECTION

All the best in each class

BEAUTIFULLY ILLUSTRATED  
 NEW CATALOGUE FREE

**J. CHEAL & SONS, LIMITED,**  
 The Nurseries, CRAWLEY.

*Please mention THE GARDEN when writing.*

## MAXWELL & BEALE BROADSTONE : DORSET

GARDEN ARCHITECTS  
 AND GROWERS OF  
 Choice Alpine and  
 Herbaceous Plants

ALSO

New and Rare  
 Hardy Heathers

CATALOGUES ON  
 APPLICATION :

WE ARE EXHIBITING  
 Rock, Formal and  
 Heather Gardens

AT THE

"IDEAL HOME" EXHIBITION  
 OLYMPIA

Position 9, Garden Annexe

*Please mention THE GARDEN when writing.*

*SPRING — One of the best times for Shrub Planting.*

## CUTBUSH'S CUT BUSHES.

In Yew and Box. The finest collection in the country.

## DWARF PERPETUAL FLOWERING POLYANTHA ROSES.

One of the finest perpetual bedding plants. From 1/- each.  
 Full list giving colours post free.

**WM. CUTBUSH & SON, LTD.**  
**BARNET NURSERIES, BARNET, HERTS,**

(All Letters to Barnet.)

And at HIGHGATE, LONDON, N.6.



*By Appointment.*

## GLADIOLUS

FIRST-SIZE BULBS.

FINEST VARIETIES.

	per doz.	100
America, lilac rose .. ..	1/6	10/0
Baron Hulot, indigo blue ..	1/9	12/6
Glory of Holland, pure white	1/9	12/6
Golden West, orange-scarlet ..	1/9	12/6
Halley, delicate salmon-pink ..	1/6	10/6
Love's Fire, coral scarlet ..	2/6	17/6
Loveliness, creamy white ..	2/3	15/0
Niagara, nankeen-yellow ..	1/9	12/6
Panama, deep pink .. ..	1/9	12/6
Schwaben, soft yellow ..	1/9	12/6
War, deep blood red .. ..	1/9	12/6
White Giant, pure white ..	1/9	12/6
COLLECTION 100 in 10 varieties ..	..	13/6
" 120 " 12 " .. ..	..	16/6
" 240 " 12 " .. ..	..	30/0
Primulinus Hybrids ..	1/3	10/6

*All Bulbs Carriage Paid. Catalogue Free.*

**WM. POWER & CO.,**  
**WATERFORD.**

*Please mention THE GARDEN when writing.*

## You Want the Best SEED POTATOES

Scotch and Yorkshire Grown.

*Send for Spring List.*

**ISAAC POAD & SONS, Ltd.,**  
 Seed Potato Merchants, YORK.

## "STRONGHOLD" VEGETABLE & FLOWER SEEDS for ALL GARDENS

SCOTCH SEED POTATOES

LAWN GRASS SEEDS  
 — of finest quality —

LISTS FREE

**STEWART & Co.**  
 13, South St. Andrew Street EDINBURGH

*Please mention THE GARDEN when writing.*



# ARTINDALE'S SPECIAL SPRING OFFER OF STRONG, WELL-GROWN, HARDY PLANTS

Artindale's

Finest varieties of

Phloxes, Delphiniums,  
Irises, Pyrethrums and  
Oriental Poppies, etc.

The best set of beautiful hardy flowers ever offered  
We guarantee every plant is a strong established root

Artindale's Hardy Flowers secured premier awards  
at the leading Shows in Great Britain during season  
1924. This is a strong recommendation for our stock.

Customers taking advantage of purchasing the whole of the  
Collections will receive **extra plants gratis**

## A1 COLLECTION of CHOICEST NAMED 12 Strong PHLOX 8/- carr. paid

Baron Van Dedem, scarlet, blood-red.  
Caran d'Ache, bright salmon-rose.  
Frau H. Gerz, milk-white.  
Mrs. A. Baker, dark salmon-rose.  
Iris, purplish-blue.  
Oxara, large pink.  
Selma, beautiful pink, cherry-red eye.  
F. A. Buchner, pure white.  
Flora Hornung, white, carmine eye.  
Border Beacon, salmon-scarlet.  
Muriel Rogers, pink, red eye.  
Emmanuel Arene, rosy-mauve.

## A1 COLLECTION OF FINEST 12 Strong DELPHINIUMS 15/- carr. paid

Andrew Carnegie, sky-blue, large flowers.  
Belladonna Semi-Plena, lovely clear blue.  
Cephalina, pale blue, mauve centre.  
Courage, pale blue, semi-double.  
Moerheimi, white.  
Perfection, grand light blue, very fine.  
Hereward, fine bright blue.  
Lize Van Veen, Cambridge-blue.  
St. John, pretty blue.  
Ustane, light blue, light mauve centre.  
Yvette Guilbert, pure bright blue.  
Zuster Lugtens, dark blue.  
Choice Seedlings, strong clumps, 6/- doz.

## A1 COLLECTION OF FINEST SINGLE AND DOUBLE 12 Strong PYRETHRUMS 9/- carr. paid

**DOUBLES.**  
Mme. Munier, exq. pink.  
Qn. Mary, fine light pk.  
Vance, cream, tinted flesh.  
White Aster, pure white.  
J. N. Twerdy, crimson,  
golden centre.  
Yvonne Cayeux, primrose.

**SINGLES.**  
Decoy, rosy-crimson.  
Comet, bright carmine.  
Hamlet, rich pink.  
J. Kelway, rich bold crim.  
Mrs. B. Brown, crimson,  
large flower.  
Standard, rosy-carmine.

## 6 very choice FLAG IRIS 6/- carr. paid

Argus, violet and purple.  
Empress of India, beautiful light blue (NEW).  
Lohengrin, cattleya-pink.  
Maori King, golden yellow, deep velvet petals.  
Mrs. A. Gray, beautiful lilac.  
Ingeborg, ivory-white (early).

## 6 ORIENTAL POPPIES 5/- carr. paid

Col. Bowles, grand large scarlet, strong stiff stems.  
Grossfurst, scarlet, the largest variety.  
Mrs. Perry, apricot-pink.  
Royal Scarlet, beautiful scarlet.  
Silver Queen, silvery pink.  
Princess Ena, salmon shaded carmine.

## ARTINDALE'S A1 COLLECTION of the FINEST 12 HERBACEOUS PLANTS 9/- carr. paid

1 Anemone, Opal	Each 9d.
1 Armeria, Ruby	1/-
1 Delphinium, Perfection	1/6
1 Statice latifolia	9d.
1 Gypsophila, Double	1/6
1 Heuchera, Pluie de Feu	9d.
1 Iris, Empress of India	1/6
1 Peony, Mons. Ch. Leveque	1/6
1 Poppy, Colonel Bowles	1/-
1 Phlox, Baron Van Dedem	9d.
1 Scabiosa caucasica	9d.
1 Ranunculus, Fair Maid of France	9d.

Catalogue on application.

## BEAUTIFUL . . HERBACEOUS. PÆONIES. . .

SPECIAL BARGAIN.—We offer the  
following selection of 12 choicest free-  
flowering varieties, - Strong 15/-  
Plants. - Carriage Paid

Boule de Neige

Pure White

Canary

White, tinted Sulphur Yellow

Duchesse de Nemours

White, Primrose Centre

Duc de Cazes

Carmine Rose and Salmon

Emile Lemoine

Deep Carmine

Edulis Superba

Pale Pink, Sulphur Centre

Felix Crousse

Brilliant Flame Red

Festiva Maxima

Fine Large White, Marbled Red

Madame Calot

Pure Carnation

Madame Jules Elie

Shell Pink

Mons. Chas. Leveque

Light Salmon Pink

Victor Lemoine

Carmine

ILLUSTRATED CATALOGUE  
OF CHOICE HERBACEOUS PLANTS  
SENT ON APPLICATION.

Artindale's

Exhibition Gladioli

Extra Choice Mixed, 2/6 doz.

Artindale's Gladioli have won the  
Foremark Challenge Cup.  
Also Sir Albert Stevenson's  
Challenge Cup at the Great  
Southport Show, 1924.

## BEDDING GLADIOLI

White Giant - doz. 100  
2 6 16/-  
Finest Large White

Pink Perfection - 2/6 16/-  
Delicate Apple Blossom

Red Emperor - 2/6 16/-  
Finest Bright Deep Scarlet

Halley - 2/6 16/-  
Delicate Flesh Colour

Prince of Wales - 2/6 16/-  
Beautiful Salmon Red

L'Immaculée - — 16/-  
Beautiful Pure White

CHOICE SEEDS.

## BALLS CALENDULA

Glowing Orange Colour. Distinctly double  
and long stemmed. The finest Annual  
for Cut Flowers or for filling bare places in  
the Herbaceous border.

Seed - - - 1/- packet.

## ARTINDALE'S GOLD MEDAL PRIMULA OBCONICA

Seed - - 1/-, 2/6, 5/- packet.

## ARTINDALE'S GOLD MEDAL VIOLAS

CATALOGUES NOW READY.

We have a limited quantity of seed to offer.  
1/- packet.

PLANTS OFFER WILL APPEAR SHORTLY.

W<sup>m</sup>. ARTINDALE & SON, Florists, NETHER GREEN, SHEFFIELD

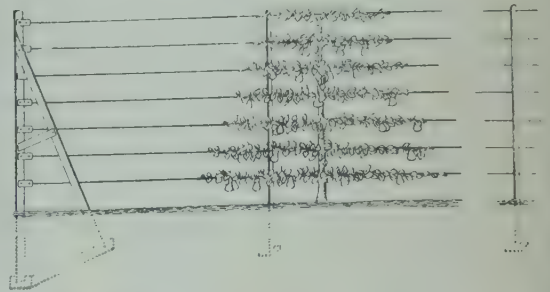


**SEED POTATOES****SCOTCH GROWN***Hand Picked.**Carriage Paid.*

	[Per 1/2 cwt.	Per cwt.
ARRAN CHIEF ..	12/-	22/-
*DARGILL EARLY ..	14/-	26/-
DUKE OF YORK ..	16/-	30/-
*GREAT SCOT ..	13/-	24/-
*KERR'S PINK ..	12/-	22/-
KING EDWARD VII. ..	13/-	24/-
*KING GEORGE ..	14/-	26/-
*MAJESTIC ..	14/-	26/-
*RHODERICK DHU ..	13/-	24/-
SHARPE'S EXPRESS ..	14/-	26/-
*THE ALLY ..	12/-	22/-
*THE BISHOP ..	13/-	24/-
*TINWALD PERFECTION ..	14/-	26/-
UP-TO-DATE ..	12/-	22/-

*\*Immune Varieties***CATALOGUE FREE****Dickson, Brown & Tait****57, Cross St., Manchester***Please mention THE GARDEN when writing.***Charles Turner's  
CATALOGUE**

OF

**VEGETABLE AND  
FLOWER SEEDS****For 1925***IS NOW READY, AND MAY  
BE HAD ON APPLICATION**Also of***Roses, Shrubs,  
Hardy Trees, Herba-  
ceous Plants, etc.****The ROYAL NURSERIES, SLOUGH***Please mention THE GARDEN when writing.***BARNARDS'  
ROSE  
PILLAR****The Best Support  
for Pillar Roses.****Indestructible  
and Artistic.****8 FT. HIGH****28/-****10 FT. HIGH****35/-****BARNARDS :: NORWICH :: ENGLAND***Please mention THE GARDEN when writing.***CORDON and ORDINARY  
ESPALIER TRAINERS**

Prices painted 6 ft. 7 ft. 8 ft. High.  
Terminal  
Strong Post.. 14/- 23/- 24/- each

Intermediate  
Standard .. 21/- 30/- 32/6 doz.

Straining Wire, galvanised, No. 14,  
2/- per 100 yards.

Rardisseurs (one for each line) 7/6 dozen.

*Carriage paid on £6 parcel.*

**1925**  
**CATALOGUE of**  
**Perpetual-Flowering**  
**CARNATIONS**



If you are interested and would like a  
copy, post your name and full address to:

**C. ENGELMANN, Ltd.,**  
**SAFFRON WALDEN, Essex**

*Please mention THE GARDEN when writing.***ECKFORD'S GIANT FRILLED  
SWEET PEAS  
—FOR 1925—****GORGEOUS FLOWERS. MAGNIFICENT STEMS**

For a wealth of cut flowers.  
For garden decoration. For exhibition

**ECKFORD'S ARE THE WORLD'S BEST**

**Special Offer.**—25 specially chosen 1/- packets of  
Eckford's Giant Frilled Sweet Peas for 1925, each  
separate and named for 20/-  
The same 25 half-packets, each separate and  
named, for 10/-

The above are a gorgeous range of colour

WRITE FOR CATALOGUE FREE. Also pedigree  
vegetables and choicest flower seeds

**HENRY ECKFORD, THE Sweet Pea Specialist Wem, Shropshire**

*Please mention THE GARDEN when writing.***MÉDOC and GUIENNE SÉCATEURS**

AND

**Flower-Gathering and Dressing Scissors****EXCLUSIVE MASTER PATENTS****Flower and Fruit-Gathering Scissors**

Patent No. 195908

MANUFACTURED BY—

**JOSEPH RODGERS & SONS, LTD., SHEFFIELD****Entirely Nickelled .. 12/6**

Postage and Packing, 6d. extra.

*Illustrated and Descriptive Price List from***Mr. C. A. JARDINE (F.R.H.S.)****Horticultural Expert and Consultant****106, Sutton Court Rd., Chiswick, London, W.4***Please mention THE GARDEN when writing.*

**IS YOUR LAWN SATISFACTORY?**  
**DAISIES, DANDELIONS, &c.,**  
are all very disfiguring, besides being detrimental to true Tennis or Croquet.

**THE PROVED Velvas LAWN SAND.****WILL REMOVE THEM AND WILL STIMULATE THE GRASS.****SEASON'S PRICES.**

In Kegs	In Bags	In Tins
112-lb. .. 29/6	112-lb. .. 26/6	14-lb. .. 5/-
56-lb. .. 16/-	56-lb. .. 14/3	7-lb. .. 3/-
28-lb. .. 9/6	28-lb. .. 8/3	3-lb. .. 1/9

If your Seedsman does not carry a stock, send your order  
direct to the Manufacturers:

**ROBINSON BROTHERS LIMITED,**  
**WEST BROMWICH.**

*Please mention THE GARDEN when writing.*



# New and Rare Hardy Plants recently introduced from China

## SPECIALITIES: MECONOPSIS, PRIMULAS, Etc.

We hold one of the finest  
collections in Scotland,  
awarded highest Honours  
Chelsea and Glasgow Flower  
Shows

Descriptive Catalogue free on  
request

## OLIVER & HUNTER

Hardy Plant Specialists

Londoniaive — Dumfriesshire

Please mention THE GARDEN when writing.

# HARRIS ROSES GUARANTEED LEICESTER GROWN

Any 6 for 5/-; 12 for 9/-; 25 for 18/-

Carriage paid.

Padre, Princess Victoria, Safrano, Colonel Fitzgerald,  
Golden Emblem, Ariel, Columbia, Evelyn, Joseph Hill,  
yon, Severine, Mdma. Ravary, Miss Alice Rothschild,  
Exquisite, Corallina, Mrs. W. A. Lindsay, Los Angeles,  
Covent Garden, Lamia, Lady Pirrie, Golden Ophelia,  
Daily Mail, Richmond, Gen. McArthur, Marg. D.  
Hamill, Lady Ashtown, Mdma. Abel Chatenay, Hugh  
Dickson, Geo. Dickson, Liberty, F. K. Druschki, Mrs.  
H. Stevens, Mrs. Henry Morse, Lieut. Chauré, Lady  
Hillingdon, May Marriott, Golden Glow, W. C. Gaunt,  
President Bouche, Midas, Clarice Goodacre, Independ-  
ence Day, Emma Wright, and many others.

Large Ramblers, 1/- each.

Excelsa, Hiawatha, Dorothy Perkins, American Pillar,  
Paul's Scarlet, Tausendschon, Alberic Barbier, White  
Dorothy, and many others.

Rose and Fruit Catalogue Free.

## E. HARRIS Cyprus Road Nursery LEICESTER.

Please mention THE GARDEN when writing.

# SYDNEY SMITH

TANSLEY "OLD" NURSERIES,  
Near MATLOCK :: DERBYSHIRE

Begs to offer in good plants, Hardy Heaths, etc.  
Lowest prices quoted on appl. a'ion, per 100 & 1000

Erica carnea (red); Erica carnea alba;  
Erica carnea pallida (pink); Erica vagans  
(Cornish heath); Erica vagans alba;  
Erica mediterranea hybrida; Erica medi-  
terranea superba; Erica mediterranea  
glauca; Erica vulgaris alba Hammondii;  
Erica vulgaris alba Serleii; Erica vulgaris  
Alportii and many other varieties.

Hardy Shrubs, prices per doz. & 100 on application  
Broom scoparia (yellow), 3ft. bushy. Berberis in sorts.  
Spiraea Menziesii triumphans (large spikes of crimson  
flowers), 3 to 4ft., strong plants. Weigela in sorts,  
Philadelphus, Veronicas. Hypericum Moserianum,  
Tamarisk, etc. Beech, common, 2 to 3ft., for hedges.  
Laurels, bushy, 1 to 1½ft. and 1½ to 2ft.

Please mention THE GARDEN when writing.

# GLADIOLI

We offer, in specially picked corms, over 200 varieties in all sections. We have received  
this season numerous unsolicited testimonials. All orders are sent for your approval and  
Carriage Paid.

## PRIMULINUS SECTION (All Top Sizes)

	Doz.	100		Doz.	100
Atalanta, Salmon	1/-	8/-	Papillo, beautiful Terra Cotta	4/-	—
Hermoine, Orange	1/-	8/-	Salmonea, Glowing Orange	2/-	—
Euridice, Clear Pink, 1/- each.	1/-	8/-	Rosaura, Rosy Carmine	5/-	—
Lactitia, Early, Salmon-Pink	1/6	12/-	The Bride, New, Pure White	10/-	—
Hesperia, Lively Salmon	1/6	12/-	Niobe, Bright Orange	2/-	—
Psyche, Orange-Red	1/6	12/-	Souvenir, Canary-Yellow	1/6	12/-
Scarletta, Bright Scarlet	5/-	35/-	Maiden's Blush, Soft Pink	1/6	12/-
Orange Brilliant, nice blending of colours	1/6	12/-	Sphinx, Light Red	2/6	20/-

All other varieties in this Section. Send for List.

## Large-Flowering

	Doz.	100		Doz.	100
America, Lilac	1/-	7/6	L'Immaculee, Pure White	1/6	10/-
Panama, Soft Rose	1/-	7/6	Odin, Orange	1/6	10/-
White Giant, largest White	1/6	10/-	Red Canna, Blood-Red	1/6	10/-
Pink Perfection, Apple-blossom Pink	2/-	14/-	Prince of Wales, Salmon	1/-	7/6
Pink Beauty, earliest Pink	1/-	7/6	Yellow Hammer	1/6	10/-
Augusta, Creamy White	1/3	10/-	Corri, Light Blue	2/-	16/-
Baron Hulot, Best Blue	1/-	7/-	Marshal Foch, Pink	1/-	6/-
Empress of India, Maroon	2/-	14/-	Schwaben, Pure Yellow	1/6	12/-

100 in 10 extra varieties for 10/-; 100 PRIMULINUS in 10 varieties for 10/-.  
Both Top Size.

## ST. BAVO ANEMONE

Best described as all-colour Fulgens. Every colour imaginable.

1/6 doz. 10/- 100 £4 per 1,000. All carriage paid and sent on approval.

## B. WINFIELD, F.R.H.S. :: EMNETH, WISBECH

# BARR'S LARGE-FLOWERED GLADIOLI

FOR MARCH PLANTING.

3 each of 20 beautiful varieties .. .. 18/6 and 30/-  
3 " " 12 " " " " " " 10/6 " 15/-  
Choice Mixture of Large-flowered Hybrids, per 100, 21/-; per doz., 3/-

## GLADIOLUS PRIMULINUS HYBRIDS.

3 each of 12 beautiful varieties .. .. 15/- and 21/-  
3 " " 6 " " " " " " 5/6 " 8/6  
New Hybrids, Mixed " " " " per 100, 21/-; per doz., 3/-

GLADIOLUS BRENCHLEYENSIS, the true old Scarlet Gladiolus,  
per 100, 25/-; per doz., 3/6

Descriptive Catalogue on application.

BARR & SONS, 11, 12 & 13, King St., Covent Garden, London, W.C.2

# SNAPDRAGONS—for gorgeous massing

## SIMPSON'S SUPER-SEED

13 Awards of Merit and 10 Highly Commended, 1920  
5 Awards of Merit, 1922, in pots at R.H.S. Wisley Trials

Send for free illustrated Seed List G, offering seeds of 42 varieties of Snapdragons at 6d.  
and 1/- per packet, with full range of Vegetable and Flower seeds of established merit.

TALL.—Esme, light pink; Rose King, deep rose; The King, orange scarlet, white  
tube; Yellow King, yellow.

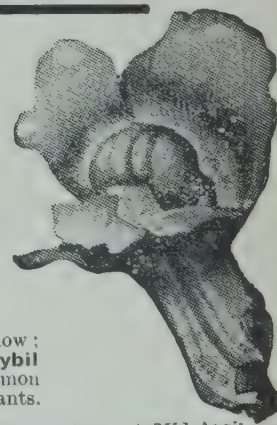
MEDIUM.—Afterglow, orange scarlet; Appleby Matthews, orange terra-cotta, white  
tube; Aurora, fiery terra-cotta; Bonfire, apricot and old gold; Carmine Queen,  
glowing carmine; Crimson King, crimson; Fascination, light pink; Golden Gem, deep yellow;  
Mrs. R. F. Felton, bright orange-scarlet; Roseum Superbum, soft rose pink; Sybil  
Eckford, apricot pink and cream, white tube; The Fawn, peach pink, white tube; Victory, salmon  
terra-cotta; White Queen, white. A further six varieties can be supplied in Spring-sown Plants.

AUTUMN SOWN. STRONG PLANTS FROM BOXES. Will be dispatched about Mid-April;  
well hardened from cold frames. Earlier delivery made if desired, 2/3 per doz.  
(if less than 12 of one variety at 3/- per doz., not less than 6 of any one variety named), 25 or more of any one variety at  
15/- per 100. Carriage extra, see below.

SPRING SOWN. STRONG PLANTS FROM BOXES. Will be dispatched early in May  
hardened off ready for planting. 1/6 per doz. (if less than 12 of one variety  
at 2/- per doz., not less than 6 of any one variety named), 25 or more of any one variety at 10/6 per 100.  
Special rates for cash with order (which must be added). Carriage, box and packing, 24 plants 1/-, more than 24, 1/6.  
When cash does not accompany order, box, packing and rail charges are charged at cost.

## W. H. SIMPSON & SONS, Super-Seed Specialists, BIRMINGHAM

Please mention THE GARDEN when writing.





SEEDSMEN BY



APPOINTMENT.

## "GIANT STRIDE"

THE LARGEST PODDED DWARF PEA IN THE WORLD.

**M**ESSRS. JAMES CARTER & CO. beg to announce that owing to the abnormal demand for their new Giant-podded Dwarf Pea, "Giant Stride," the supply of seed for this season is almost exhausted.

Orders are being executed in strict rotation, and so long as stock lasts.

To those Customers who have not yet ordered, and may be disappointed by not receiving any of the "Giant Stride" Pea this year, Messrs. James Carter & Co. tender their apologies.

Although not having the wonderful Dwarf character of "Giant Stride," many other large-podded Peas are described in the **ILLUSTRATED CATALOGUE, POST FREE on application.**

*Barter's*  
TESTED SEEDS

RAYNES PARK,  
LONDON, S.W. 20.

BRANCHES: { 237 & 238, HIGH HOLBORN, W.C. 1.  
53a, QUEEN VICTORIA STREET, E.C. 4.

### Notes from Maidstone.

#### DELPHINIUMS

It is still safe to plant Delphiniums. Our List, which will be sent post free contains all the best varieties, such as Rev. Lascelles, The Alake, King of Delphiniums, Mrs. Shirley, Mrs. Townley Parker, Lord Derby; while the beautiful nemophila blue Queen Mary is now offered at the special price of 2/6 each, as we have worked up a good stock.

IRIS may still be planted, and we shall be pleased to send our List.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Maidstone.

Established 1796.

*Toogood's  
Seeds*



The same labour, the same tools, the same manures—**WITH OUR GUARANTEED GARDEN SEEDS ADDED**—will yield for you an infinitely better Garden than ever before. Send a postcard to-day for our 160-page beautifully illustrated

**FREE GUIDE TO  
GUARANTEED  
GARDEN SEEDS.**

Every packet ordered thence **MUST** grow for you and please you or you will get it replaced freely: and the seeds cost less to buy. Address us personally:

**TOOGOOD & SONS, Ltd.,**  
Seedsmen to H.M. the King, **SOUTHAMPTON.**

Please mention THE GARDEN when writing

To restore the Beauty of the Lawn or to make a perfect New Lawn use

## WEBBS' LAWN SEEDS

Pamphlet on  
Making  
and  
Renova-  
ting  
Lawns  
Post free  
on application



Webbs'  
Illustrated  
Garden  
Cata-  
logue for  
1925  
Post free  
on application

### Tennis, Croquet and Garden Lawns, Bowling Greens, etc.

No. 1 Mixture (without Perennial Rye Grass), 2/9 lb.; 14 lbs. 37/6; 28 lbs. 72/6  
No. 2 Mixture (with Perennial Rye Grass) .. 2/- lb.; 14 lbs. 27/-; 28 lbs. 52/-

**Webbs' Improved Lawn Sand**  
For destroying Weeds.  
14lbs. 4/6; 28lbs. 7/6; 56lbs. 13/6;  
112lbs. 25/-

**Webbs' Special Lawn Manure**  
A perfect Fertiliser  
14lbs. 4/6; 28lbs. 8/3; 56lbs. 14/6;  
112lbs. 25/-

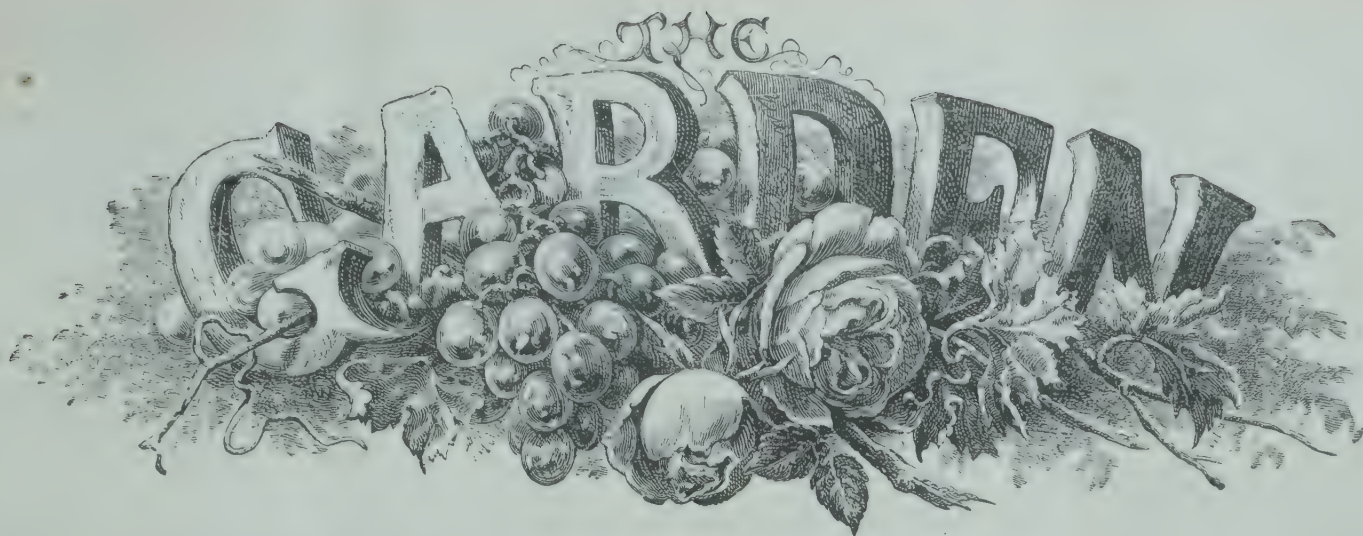
**WEBB & SONS, LTD.,**

THE KING'S  
SEEDSMEN

**STOURBRIDGE**

Please mention THE GARDEN when writing





VOL. LXXXIX.—No. 2783.

MARCH 21, 1925

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
 Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
 Entered as Second-class Matter at the New York, N.Y., Post Office.

## SPRINGTIME

**E**VEN in the most squalid of springs there is something to admire in flower, and no spring, however harsh and inclement it may be, is so devastating that it will remove all the blossom which pleases us year after year. The other day a few friends and I voted as to what flowering trees and shrubs we should grow in our gardens supposing that we were limited to six kinds. The only plant which everyone agreed was indispensable was a cherry of sorts. Several varieties were mentioned, among them *Prunus Conradini* and the ordinary double English cherry, but as long as it was a cherry we waived the question of variety.

I think that most gardeners would agree with us over this, for the cherry, probably more than any other tree or shrub, is symbolical of springtime, and that is a time of year when we like to be warned that summer and flowering time

are approaching. Covered with masses of beautiful white to pink flowers standing out from their black sombre coloured and funereal branches, characteristically knotted and gnarled, they present a picture in our mind's eye that is rarely if ever forgotten. Not only does it gladden our hearts and create a warmth of affection for the trees, but it signifies an intention on the part of Mother Earth to fulfil her share in making provision for the future. Although the cherry has spread throughout the world, yet there is something about it that personifies an English orchard or an English home. And what could be more graceful! The trees in the illustration below, smothered in blossom and with a grace of form that cannot be improved upon, are growing in an ordinary orchard. They are not grown for ornament, and yet I doubt if any ornamental plant can excel them in beauty.

E. H. M. C.





# A SELECTION of PANSIES and VIOLAS

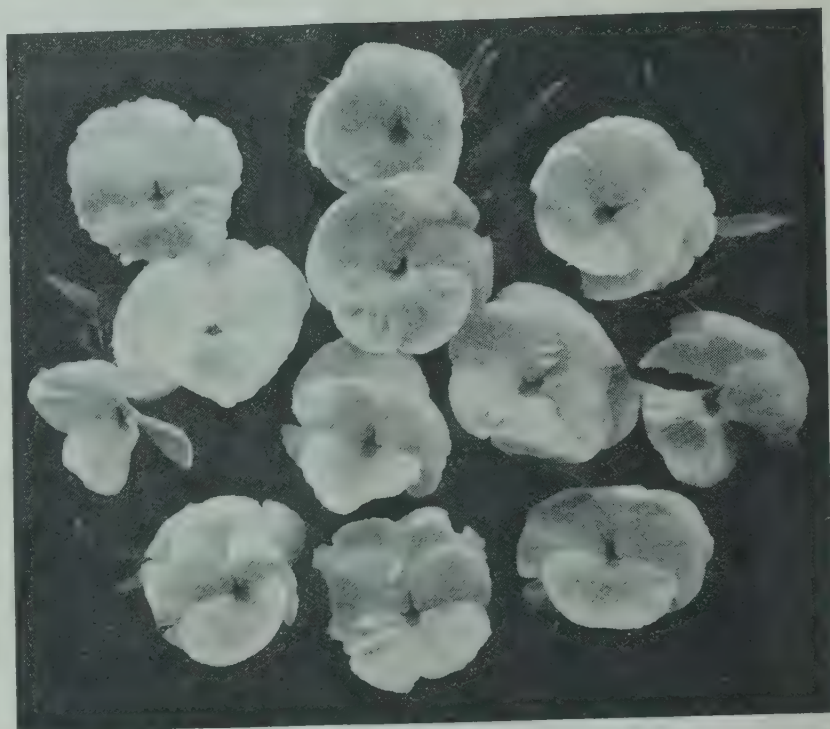
**T**HERE seems to be a revival of interest in the culture of these pretty and useful little flowers. They appeal strongly to the town or suburban gardener who finds some difficulty in obtaining the best results from more exacting floral subjects. In the smallest plot, even if it lies within the smoke zone of a big city, pansies and violas can be grown.

Where conditions are more favourable they not only thrive but give a continuous display of bloom from early spring until the frosts come. A rich medium loam suits them best, and in those parts of the country where the climate is very temperate and rainfall above normal it is quite an easy matter to obtain good flowers. In Scotland and in some of the hilly districts of northern England first-class blooms can be grown with a minimum of trouble, and plants in districts that lie well above sea level are rarely troubled with disease. They are not widely grown in the south, but it has been proved that certain kinds can be grown successfully there, and there is no reason why the strongest of the bedding varieties should be excluded from southern gardens.

Pansies and violas should be grown in beds or borders where they receive the full benefit of the morning sun; but, if possible, they should be protected from the scorching effect of summer heat. Trees that are planted some distance away, walls or fences, will often provide the necessary shade; but where the situation is open it may be advisable to use artificial means of shading them in the height of summer. To plant them in a low-lying part of the garden, even if this be shady, is not a good plan, as in a wet season there are many casualties among plants in such situations.

A study of the structure of the plant will reveal two sets of roots, one that penetrates to a depth of five or six inches, and the other reaching out among the surface soil. The soil should be cultivated to a depth of a foot or more to enable the longer roots to have a cool run, and when the plot is being dug over it is a good plan to work in a liberal quantity of well rotted animal manure and bone-meal as sustenance for the plants throughout the season and a source of food supply when the surface roots cannot perform their functions during a period of drought. A mulch applied during hot weather is beneficial in tiding the plants over a dry spell, but unless they have a good foundation in the lower levels they cannot keep up a continuous display of flowers of the highest quality. If beds or borders have not yet been prepared this should be done without delay so that the soil has time to settle before planting time.

It is unwise to plant out too soon. March planting is quite early enough in the south; northern growers would



WILLIAM BARR A FINE WHITE VIOLA WITH WELL SHAPED FLOWERS.

be well advised to wait until April. Early planting sometimes results in loss of plants or withered growths as a consequence of late frosts or cold east winds. This is more noticeable in exposed districts.

When planting out choose a day when the soil is friable and plant firmly. If the plants have been raised at home or obtained locally keep each rooted cutting in its surrounding ball of soil, as the young roots are very tender and must not be damaged or become dry. A well grown plant in autumn will often measure 6 ins. in diameter, so that it is well to give as much space between the plants as is possible. If they can be planted a foot apart so much the better, as this also makes it easier for hoeing and mulching during the summer.

Bedding violas are specially recommended for those who desire a long and continuous display of bloom regardless of the size of the individual flowers. They have a tufted habit, generally a sturdy growth, and most of them will come through an ordinary winter unprotected. They are easily propagated from cuttings or by division of the old plants in the spring. Rooted cuttings after becoming established can be left undisturbed for two seasons, when they will give an early display the second spring and afterwards may be trimmed to preserve a neat appearance. Selections may be made in selfs, fancies, edged and bordered varieties or bronze shades. The latter should be protected from the fierce rays of the sun in the middle of summer, as they are apt to become scorched. A dozen reliable varieties might include Swan (the best white bedder), Lady Knox (cream), Royal Sovereign (pale yellow), Tangerine Harrison (deep orange), Moseley Perfection (deep yellow), Maggie Mott (pale mauve), John Quarton (light mauve), W. H. Woodgate (light blue), Improved Archie Grant, or Edina as it is called in Scotland (dark blue), Royal Purple, Pride of Darras (white with a broad band of purple) and Jubilee (dark velvety purple).

The exhibitor must look for larger-flowered varieties, for, with the exception of Moseley Perfection, the above-named are either small or medium flowered. During the past few years



AN EXAMPLE OF THE EFFECTIVENESS OF WELL FLOWERED VIOLAS IN A BED BY THEMSELVES.



I have grown most of the leading kinds, both old favourites and newer introductions, and although personal taste plays an important part in the matter of selection, the following twelve should please the most fastidious grower: William Barr (white), John Adamson (orange self), Kathleen Condry (deep purple), Mrs. Andrew Stevenson (deep yellow with a heavy band of deep heliotrope on the side and bottom petals and a suffusion of the same colour on the top petals), Mrs. William Boyes (lemon yellow with a picotee edge of lavender), Jean Drummond (lemon yellow self), John Wood (one of the best striped varieties), Lily Stark (deep violet with lavender top petals), James Dewar (white with picotee edge of blue), Mollie Gibb (creamy white with picotee edge of heliotrope) Olive Harrison (primrose edged with sky blue) and Mrs. R. Beveridge (a distinct shade of lavender-pink).

Some of the exhibition violas, such as Sir Edward Grey and Master Stevenson, while being capable of producing fine individual flowers, are of too straggly growth to be useful for general garden decoration; but many of the newer, large-flowered type, such as John Adamson and Olive Harrison, have a splendid habit and can be used for bedding or massing if desired.

There is a type of pansy, known as the bedding pansy, of which Messrs. Dobbie and Co.'s richly coloured Bellfield is a notable example, which promises to be used largely for massing and bold colour effect. In this class there are now many lovely shades of bronze.

As a rule, pansies are more inclined to grow "leggy" and sprawl, but if they are used for garden decoration I have found that they are very effective if planted fairly close together and allowed to ramble at will, when the growths and flowers become intermixed in a sort of abandon that gives quite a brilliant and varied effect in the mass. The exhibitor who grows pansies, however, must be more orthodox in his methods. It may even be necessary to shade them, to restrict the flowering and to thin out side growths.

A dozen up-to-date fancy pansies might include Mrs. Andrew Frater (plum purple, sulphur yellow, old rose and magenta), Annie Beveridge (deep violet, terra cotta and lemon), Robert Beveridge (deep purple, white and magenta), Mrs. A. B. Cochrane (purple and cream), Jean Lister McKellar (dark purple and creamy white), Dr. McKinnon (plum, lemon and rosy purple), Mary Drummond (brown, deep yellow and crimson), Dr. Ogilvie (dark purple, white and violet), Nellie Cochrane (light purple, claret, white and crimson), John Greig (dark purple, crimson, canary yellow, light purple, violet and white), Mrs. A. Harrison (dark violet and cream) and Alexander Lister (plum, rose and white), an old variety, but one that is still very popular and one that gains the prize for the best bloom in the show more than any other. The new variety, A. R. Stevenson (claret, pale chrome, yellow and wine colour), is said to be one of the finest pansies of recent introduction, and it will probably prove to be the sensational novelty of the forthcoming season. It bears the name of one of our greatest raisers.

NORMAN LAMBERT.

## LILIUMS: PLANTING AND SOIL CONDITIONS



A FINE GROUP OF LILIUM CANDIDUM.

WITH the exception of a few Indian species, most of our cultivated lilies are hardy, especially with a little protection in the case of some American ones; losses during the winter generally resulting from damp, which is probably much more fatal than cold.

The cultivator of a choice collection of lilies under our climatic conditions is confronted with a difficult problem: for, during the summer months, a considerable amount of moisture at the root is essential for success, whereas in the winter this dampness will prove fatal. The grower of choice lilies is thus faced with the problem of providing conditions that will be more or less suitable for both summer and winter. Here we may take it for granted that suitable winter conditions are the more important of the two: and the most essential point is sharp and perfect drainage, which may be a possible disadvantage during dry weather in the growing season. This is not serious, as long spells of dry weather are not at all frequent, and the difficulty can be overcome by means of watering. I shall try to show that good winter conditions

may be obtained by free drainage, without causing the bulbs to suffer unduly from dryness at the root during the summer.

In nature most species of liliiums grow in association with other plants; it may be that shrubs, grasses or herbs, and the roots of neighbouring plants keep the soil in good mechanical condition. Here, I feel sure, is the clue to our failure to grow many lilies—and, indeed, many other plants—successfully, for they lack the association of other plants which help to keep the soil well drained and in good mechanical condition. Considering this, it is not surprising that we frequently fail with a choice liliium, a few bulbs of which are often placed in a bed or portion of a bed utterly devoid of roots, causing the soil to become water-logged during winter, with the result that the bulbs fail to make roots and ultimately decay. On the other hand, there are quite a number of good garden lilies that will succeed quite well in any good properly drained garden soil. For example, such strong-growing garden lilies as *L. candidum*, *L. croceum*, *L. Martagon* and its varieties, *L. tigrinum*, *L. testaceum*, *L. Henryi*, *L. umbellatum*, *L. chalcedonicum*



and *L. elegans*. All the foregoing are loam lovers, and many failures with them are due to the fact that peat is used in the compost. *Lilium candidum* should be planted during August, while all the others should be planted as soon as the bulbs can be obtained; or, if stocks exist, replanting should be done as soon as the stems have partly dried up, some time during October being the most suitable, while the ground is still warm. If there is any suspicion that the planting sites are not well drained, the soil should be removed to a depth of at least 2ft., or even 2½ft., this to allow room for plenty of drainage, which should consist of 6ins. of clinkers or any small rubble. There is no reason why some soil should not be mixed with the drainage. Under these conditions healthy bulbs should come safely through the winter.

With sharp drainage one is faced with the necessity of watering during spells of dry weather, and if it can be arranged some system of sub-irrigation is undoubtedly best. In a small way this could quite well be done by inserting a length of small drain pipe at the side, or even in the centre, of a group of plants. Although this, under certain conditions may be desirable and necessary, especially where many choice species are grown, I do not in a general way consider it to be essential. Where the collection of choice species is large, it might be advisable to construct a special bed with underground perforated pipes for watering purposes; but, generally speaking, we must regard this as being beyond the resources of the average cultivator, and is only necessary in exceptional circumstances. I would, rather, advise the use of ample drainage in the form of rubble mixed with a little soil, 1ft. or even 18ins. below choice lilies, which will ensure sharp drainage during the winter months, and, what is of prime importance, will conserve moisture at the roots during dry weather; and by this simple method we achieve the two-fold object. During dry weather the surface moisture may be conserved by mulching with well decayed flaky leaf-soil; a mulch of this kind is especially valuable in the case of stem-rooting lilies. When drainage of this description is provided, it is surprising the mass of roots which will develop in it; and in this connection we have a parallel in the moraine or scree bed in the rock garden, where many small, choice, deep-rooting alpine plants can be successfully grown, whereas they are more or less failures when grown in ordinary soil.

Returning to the planting of our lilies, I would advise, when preparing the sites, that a hole from 2ft. to 2½ft. deep be made, varying the depth according to the strength of the species to be planted; 12ins. to 15ins. of the prepared drainage



LILIAM TESTACEUM IS MOST EFFECTIVE AGAINST A BACKGROUND OF TREES.

should be placed in the bottom of the holes, afterwards filling them in with prepared compost, which, of course, will vary according to the species; but a good medium loam, with the addition of well decayed leaf-soil and plenty of good gritty sand, should answer for most of the species in cultivation. This prepared compost should be trodden fairly firmly—I find it is a common mistake to leave it too loose, which results in its getting water-logged by moisture draining in from the firmer surrounding ground. Here I am assuming that the planting sites are being made in beds of dwarf shrubs, as in a general way they afford us the best conditions for success, since their roots help to keep the soil in good mechanical condition, as well as affording the young shoots shelter from cold cutting winds during the spring, and providing a certain amount of shade for the roots during the summer—all three important essentials for success.

The sites should be prepared immediately before, so that the compost is always in good working condition; the holes being filled up to within 6ins., 6ins. or 4ins. of the top, according to the particular species. For example, stem-rooting lilies should be planted deeper than species that do not produce roots from the stem; while large bulbs, naturally, should be planted deeper than small ones—although there are exceptions to this rule. For instance, in the case of *L. candidum* and *L. giganteum* the top of the bulbs should be little more



ONE OF THE MOST GRACEFUL OF LILIES, *L. MARTAGON ALBUM*.



than covered; on the other hand, bulbs of *L. auratum* and *L. Henryi* may be planted 1ft. in depth.

Having put in the prepared compost to the required depth, taking care to tread it firmly, a layer of sharp gritty sand should be added, pressing the bulbs into this, and a covering of sand given; the holes should then be filled in slightly higher than the surrounding soil, as the fresh compost is sure to sink a little, and pressed fairly firmly, afterwards marking the sites with a short bamboo cane.

When preparing the compost I consider it is an advantage if a quantity of small stones are mixed with it, as they conserve moisture and assist drainage. Some cultivators when planting choice lilies place an inverted flower-pot underneath the bulbs, while others lay them on their sides to prevent wet lodging in the scales. When proper drainage is provided, I doubt if such methods are necessary, but that is a matter that rests with the individual, and when dealing with this fickle and beautiful race of plants no possible means of securing successful results should be neglected.

Certain Californian species, such as *L. pardalinum*, *L. Parryi* and *L. Humboldtii*, are often spoken of as swamp lilies; the beginner should not be misled by this, for no lily is likely to be happy or live long in swampy, stagnant conditions. In their native habitats the species in question may grow in moist situations, such as streamsides, etc., but it is certain that

the bulbs are always high and dry, even if their roots do reach down to the moisture underneath, and that this underground water is nearly always moving, and not stagnant. In any case, we must remember that there is a vast difference between natural conditions and what we are able to give the plants under cultivation, for, as I have already hinted, plant association in nature plays an important part in plant growth. Again, it does not always follow that if we try to reproduce natural conditions in the garden that success will follow in the cultivation of plants. If we take *L. pardalinum* as an example: one is generally advised to give it plenty of peat in the compost, whereas it really succeeds best and increases freely when grown in ordinary well drained loam, with the addition of some well decayed leaf-soil. In nature, lilies cover such a wide geographical range and grow under such varying conditions that it is difficult to lay down any definite rule as to local conditions. Although the latter play an important part in the successful cultivation of any particular species, good drainage (and shade at the root) is of chief importance. Also, at the same time, under our climatic conditions, they can do with full exposure to the sun: with the exception of *L. giganteum* and *L. cordifolium*, which are woodland lilies and—in the South, at least—require a certain amount of shade, although in Scotland they do splendidly out in the open with full exposure to the sun.

J. Courts.

## ANEMONES FOR BEDS AND BORDERS

IN ANY GARDEN, ANEMONES, WITH THEIR VARIETY AND WEALTH OF COLOUR, ALWAYS FORM ATTRACTIVE SUBJECTS,

THE name anemone recalls at once to the minds of many the vision of a woodland or copse in April with the sun shining through the leafless trees on to a snowy carpet of dainty woodland anemones gently waving in the breeze. These anemones are fragile, but among the whole genus (often called the windflower) there are cultivated species suitable for the wild garden, a most valuable group for the rock garden, and a number of sturdy members which are very effective in beds alone or in the mixed border. The size and form of anemones vary from the small tufts of *A. Pulsatilla* to the tall heads of *A. japonica*, which are borne on stems nearly 4ft. in height. The colours in anemones are countless.

Although border anemones are long established favourites, within the last thirty years some of the species have been improved to such a great extent that a much larger number are being grown. There are two distinct branches in the border types, the spring-flowering kinds and those which bloom in the autumn. Among the early-flowering type the most important species are the tuberous-rooted *A. coronaria*, *A. fulgens*, *A. alpina*, *A. sulphurea* and lastly, *A. sylvestris*. The chief autumn-flowering anemone is *A. japonica* and its many varieties, which are all herbaceous plants. Of all these *A. coronaria* is the largest

section and it is upon this group that the efforts of the specialist have been concentrated. From the wild species, the poppy anemone of Asia Minor, various strains have been produced by selection, for example there are the "Caen" type

of French origin, the double "chrysanthemum flowered" race, the double Nice anemone, and the most recent of all, the St. Brigid strain. The latter are semi-double, and all are in a great variety of beautiful colours. There are single as well as double kinds of the "Caen" anemone.

The poppy anemone and the various strains thereof thrive in warm deep soil, but they dislike cold and damp during the winter. Some growers hold that the cold wetness of winter is very liable to injure the plants and that the tubers should be lifted after flowering and stored until the planting time. On the other hand the disturbance of the roots is more likely to cause poor results than the effects of damp, and the best method is to plant the tubers in really well drained soil and leave them untouched, unless, of course, the soil is particularly heavy.

The St. Brigid anemone is worthy of good treatment and if the cultural details of this are mastered, any of the other types of poppy anemone will flourish exceedingly when grown in a similar way. Their great variety of colours and their robust, sturdy growth are two factors which make people anxious to grow them. The latest forms of St. Brigid anemones are vastly improved and vary from deepest crimson to purple, brilliant scarlet, delicate blue, pink, mauve and violet to almost white. Some are distinctly



A TYPICAL ST. BRIGID ANEMONE.



zoned with white, red or rose. All the shades blend harmoniously together and of all the anemones the St. Brigid look perhaps more effective when planted in beds by themselves rather than intermingled with other flowers in the herbaceous border. The flowers are borne on strong, erect stems and the broad petals form a shallow cup.

The secret of success with St. Brigid anemones is to give them firm, well drained soil and plenty of moisture during the growing season. Firm planting is essential and the roots should never be disturbed with any tool; when weeding is necessary it must be done by hand. These tuberous-rooted anemones are propagated by means of seed or division of the tubers. The tubers are planted in October or November and again in spring and later. If some are planted now there will be a fine display of flowers from early summer onwards. By planting at different intervals a succession of bloom is obtained. The most suitable

stick, drill holes exactly 3ins. deep and 4ins. apart; drop into each a root, then fill up with soil. When the whole bed is finished it should be made firm by pressing with the back of a rake or rolling with a light wooden roller.

After autumn planting some growers cover the beds with leaf-soil as a means of protection, but this is not necessary in most districts. If the flowers show signs of developing before sharp frosts have ceased, a light covering can be given. St. Brigid anemones planted during October and November bloom from the following April, those planted in the spring flower from early summer onwards according to the season. Flowers are produced for several years if the soil is particularly suitable, and, as it has already been said, the tubers should not be disturbed until they appear to be worn out or the ground needs replenishing.

During the growing season these tuberous anemones should have a mulch

larger proportion of well decayed cow manure thoroughly incorporated with the soil produces a more suitable compost. The seed is encased in a woolly covering which causes it to adhere together, making thin and even distribution some what difficult. To overcome this, mix the seed with slightly damp silver sand and rub between the fingers, by which means the seed is separated and can be scattered easily. Rake and make the bed firm before sowing. The seed should be sown in drills  $\frac{1}{2}$ in. deep and 10ins. apart or it can be scattered broadcast over the bed. When the sowing is completed cover lightly with some fine soil and give a little water if the ground is dry.

Until germination has taken place, some means of shading the beds is necessary. Tiffany, sheets of newspaper or evergreen shoots can be used. When the seedlings are up, which will be in about one month's time, remove the covering and give a watering, and leave them in the seed bed until the following year. They will bloom in April and directly the foliage has died down and before second growth has started they should be lifted, dried and stored until they are planted in their permanent quarters in October.

*A. fulgens*, the vivid scarlet windflower can withstand frost, but not stagnant moisture. It needs a rich, well manured loam in a position in partial shade. Its beautiful scarlet flowers look equally attractive in a mixed border or in a little nook on the rockery, while in a bed by itself *A. fulgens* makes a wonderful effect. The most satisfactory way of propagation is by division of the roots in early autumn, but it can also be planted in February and March.

The alpine windflower, *A. alpina* grows to a height of nearly 2ft. Its creamy white flowers are purplish outside and division is the surest way of propagating it. Seed is the best method of increasing the variety *Sulphurea* of *A. alpina* and it needs a warm well drained soil and plenty of moisture during the summer. Both of the last two anemones bloom during May.

The pure white snowdrop anemone, *A. sylvestris*, in any border is a delight to the eye. Its delicate drooping flowers are borne on stems 1½ft. in length in May and June. This is suitable also for shady places and it should be increased by division.

*A. japonica* is known to all; its handsome white or rose-coloured flowers are seen during the autumn decking the borders, the shrubbery or the woodland of many gardens. It is an herbaceous perennial and once it is established, if left untouched will go on flowering for some years, especially if the soil has been well dug and given a liberal dressing of manure before planting. There are several excellent varieties, such as Queen Charlotte, rose coloured and darker outside the petals; Lady Ardilaun, a pure white single; Alice, silvery pink and semi-double; and alba, a pure white form of *A. japonica*. They vary in height from 2½ft. to 3ft., and continue blooming until they are cut down by frost in late autumn.



ONE OF THE BEST AUTUMN FLOWERING ANEMONES, *A. JAPONICA CRISPA*.

soil is friable, rather heavy loam. If the soil is very heavy clay it should be artificially drained and a liberal dressing of sand given. Well decayed cow manure and chopped-up old turf greatly improve the beds, and should be well mixed with soil to a depth of 15ins. to 18ins. when the beds are dug. Leave the beds for a short while to settle, and then just before planting break up the surface and rake level. The tubers are irregular in shape and, when planting, the growing knob should be placed upwards and the tuber laid flat at the bottom of the hole. If in doubt as to which is the growing point, plant the tubers sideways and they will automatically right themselves. There are often the remains of root fibres on the underside which are a help in recognising the correct sides. The tubers can be divided, and each piece will grow provided it has a growing point. This is not often done except for breeding purposes. Before planting make the bed thoroughly firm, and, by means of a thin

of well rotted short manure to keep the roots cool and moist. If this is not sufficient and the roots appear to be dry, copious supplies of water should be given. Mulching, watering and hand weeding are necessary during the summer months, and until it is time to renew the beds a brilliant array of flowers will be obtained with a minimum amount of labour.

When the beds begin to show that they need replenishing, preparation should be made for increasing the stock. This can best be carried out by purchasing some more tubers, for unless seedlings are carefully raised vigorous tubers are not formed, and thus it is more satisfactory to buy from some reliable grower.

Other species can be raised from seed sown as soon as it is ripe in July, and seed from only the best coloured plants should be used. A bed in a warm situation should be well prepared several weeks before sowing in the same way as advised for the permanent beds, but a



# THE CULTIVATION OF THE GLADIOLUS

BY MAJOR G. CHURCHER.

THE SWORD LILIES INTRODUCED FROM SOUTH AFRICA ARE AMONG THE FINEST, HARDEST AND MOST FREE FLOWERING SUBJECTS IN OUR GARDENS, WHERE THEY SHOULD FIND A CORNER HOWEVER SMALL.

THE gladiolus has been well described as the most decorative and most easily grown of all summer-flowering bulbs. Certainly there are few flowers that can vie with it for decorative use and lasting qualities, when cut for the house. Yet, like many other plants, it repays you for a little extra care and attention.

Those who have had some experience with the flower will have taken care to see that the proposed beds have been well and deeply dug and any necessary manure applied during the winter; and have, no doubt, been looking at the bulbs recently with a view to getting them back to Mother Earth.

The bulbs themselves have, by the indication of rootlets shown that they too think it is getting near planting time. The mild weather has, no doubt, been the cause of this early tendency to grow. It might therefore be as well to remind those who have not had much experience with the gladiolus, of the necessity to unpack the bulbs as soon as received and open the bags so that the bulbs may have plenty of air. There is one exception to this rule, and that is in the case of bulbs coming from Canada and the U.S.A. It is just as well to let the package remain in a cool place for twenty-four hours before unpacking, and do not allow the bulbs to be subject to a rapid rise of temperature.

Let us now assume that the beds have been properly prepared and the soil is in a workable condition, the bulbs may be planted, according to size, from 3 ins. to 8 ins. apart, having regard to the space to be filled. Bulbs of different varieties vary greatly in size, without in any way affecting their blooming qualities. Large flat bulbs are generally old and of little value for the production of large flowers. Judge by the depth of the bulb, rather than the width. If planting in rows, after many experiments in various distances, it will be found that 2 ins. between the rows is the least width to give good results. This width enables the soil between to be kept well cultivated. Should space be valuable, plant in double rows in the same way as you would plant broad or runner beans, leaving the full width of at least 2 ins. between the rows. The depth of planting must be governed by the size of the bulb and the soil conditions. A sandy loam is more suitable for deep planting than a stiff soil. Deep planting helps to overcome the need for staking.

Successive plantings used to be advocated for prolonging the blooming season, but there is such a difference in the time required by the different varieties to attain their full growth that a succession of bloom can be obtained by selection. This will be quite understood when it is known that the time varies from 60 to 120 days. If, however, it is desired to have one particular flower over a long period, successive plantings from ten to fourteen days should be made.

The gladiolus likes water, provided good drainage can be assured, and good cultivation will be of more benefit than artificial watering. Keep all weeds down and the top soil loose and in a mulch condition. If watering becomes necessary always follow with the hoe before the surface has had time to cake.

Artificial manures are best given in liquid form and when the ground is moist. Lime improves the colour of the foliage and the bloom.

Some people think the gladiolus is too stiff for use in beds, but I would suggest that very effective beds may be had by

planting a groundwork of antirrhinum with the gladiolus coming up between. Most of us have grown beds of yellow or blood red wall-flowers with red or yellow tulips showing above. The same idea of colour combinations may be worked out with the gladiolus and antirrhinum. Heliotrope can also be used as a groundwork with one of the yellow or white varieties of primulinus. In borders good broad stretches of colour should be made against a background of delphiniums and Michaelmas daisies.

The number of varieties has greatly increased during recent years and some confusion in the names has been the result. Some growers, however, are trying to clear away this bugbear. Two or three years ago I bought Highland Laddie as a new variety and this year I find Mr. Kunderd has a new introduction of that name with the following note:

"By mistake the name of Highland Laddie became attached to my old variety, 'Red Copper.' I have purchased the name from my friend Mr. McKibbin and given it to this very beautiful new pink."

At one of the meetings of the R.H.S. last year I was attracted by a flower on one of the stands, but the name Bleriot did not appear to me correct. I asked the attendant and I was assured that it was correctly named. However, I was not con-

vinced that it was like the flower I grew under that name and on looking up my notes I find that my Bleriot was raised by Vilmorin and received an award of merit in 1914. It was not a particularly good doer, but it flowered in 1916, 1917 and 1918; the colour description was carmine lake, overlaid with plum violet, small blotch of creamy white. The flower illustrated is thus described in Messrs. Bath's catalogue: Apricot rose, with orange throat, lovely colour, large flower, good spike.

Many more instances of duplicate names might be given, but the above illustrations will be sufficient to remind readers that in taking notes at shows care should be made to add to the names the colour descriptions of the flowers, as comparisons can then be made.



G. BLERIOT CARRYING A LARGE SPIKE OF BEAUTIFUL ROSE TINTED FLOWERS.



# PLANTING THE WATER AND BOG GARDEN

(Continued from page 144.)

WITH THE EMBELLISHMENT OF THE SIDES OF LAKES AND PONDS IN THE GARDEN BY THE JUDICIOUS SELECTION OF SUITABLE PLANTS, A NEW CHARM IS ADDED TO THE GENERAL LANDSCAPE EFFECT WITH A MINIMUM OF TROUBLE.

OF all the herbaceous plants that beautify the water garden none offers quite the same attractions as the astilbes and spiræas.

The astilbes (goatsbeard) alone are becoming a formidable list of plants. There are several distinct types, and most of the remainder are hybrids between these. They love the water's edge, where they can get their roots right down into the wet mud in summer. Nor do they object to this saturation in winter. The finest species are *A. Davidii*, a really beautiful plant if it can be isolated from any other colour, but it is of that shade of bluish purple (the minute anthers are bright blue) that maddens the colour sensitive when placed in juxtaposition with any other colour. *A. grandis* is perhaps its safest companion, being white. *A. rivularis* and an improved form known as *A. r. major* are also white and bold, graceful plants with nothing quite equal to them for the extreme water's edge. The old well known *A. chinensis* with its slender pale pink plumes completes the list of the necessary types. All the remainder, of which their name is legion, are hybrids between the above. Cream Pearl, Princess Mary, Salmon Queen, Vesta, Rubella, Siegfried and others, all varying shades, white to the deepest salmon pink and some nearly approaching purple. All are worth growing.

The spiræas have occupied the hybridist less than the astilbes, and the available list is therefore more limited. No water garden should be without the glorious crimson *S. palmata* or its pink form, *S. palmata elegans*. There is a white form also for those who desire it. Another indispensable is *S. venusta* and a bolder habited deeper pink form called *S. venusta magnifica*. The distinction is so marked between these two that I have sometimes wondered whether the latter has any right to pose as a *venusta* at all. It suggests *S. gigantea* in its habit of growth. *S. gigantea* (Kamtschatica) is a noble species for the large water garden, but is too rampant for small areas. It will grow 8ft. high and in a very short time as much through. *S. Aruncus* is a very fine and graceful plant. *S. filipendula plena* (double dropwort) and the double meadow-sweet, *S. Ulmaria fl. pl.* completes the list.

About equal in order of merit with astilbes and spiræas for the purpose we are discussing are the moisture-loving irises, and the queen of the race for this purpose is undoubtedly *Iris Kämpferi*, better known as the Japanese iris. Having made that statement I feel constrained to qualify it. All the varieties of *I. Kämpferi* succeed well in rich, damp soil, but permanent moisture is not really essential to their well-being. During the growing season they insist upon plenty of it. During the dormant months they are better without too much wet at their roots. They like a situation where they can get their toes down into the cool moisture in the hot days of early summer.

They are happiest if the water recedes from them in winter. There are nominally about seventy or eighty varieties of them, actually there are about twenty-five or thirty distinct sorts that are worth growing separately. The colours range from the purest white to the deepest violet-purple.

After *Iris Kämpferi* come a whole range of species, all of which like more or less moisture and some revel in wet conditions. The largest class of these is the Siberian subsection of the beardless irises. Of the true Sibiricas, Purple Emperor, Perry's Blue, *Orientalis* Snow Queen and a variety named last summer (on account of its colour) by Mr. E. A. Bowles Kingfisher Blue, are the best. Closely allied to these

• is the somewhat variable, so far as colour is concerned, *Iris Delavayi*. The stock at present in commerce is the produce of seeds sent home by Wilson, in which there have always been variations in colour, and to some extent in form. The best of them is a wonderful and richly coloured violet, known as *I. Wilsoni*, one of the species that only gives of its best under moist conditions in the soil. *I. Bulleyana*, lilac and purple, and *I. chrysographes*, deep red-violet with golden veins, are others of value in this group.

The sub-section *Iris Spuria* does not insist on moisture, but succeeds in damp ground admirably. The same remarks apply to *ochroleuca* (*orientalis*), a giant ivory white; *aurea*, golden yellow; *Monnieri*, primrose yellow, all these three growing 4ft. to 5ft. high in rich damp soil, and the hybrids *Mon-spur* and *Mon-aurea* are equally satisfactory.

*I. lævigata*, a Japanese species that was for many years credited with the parentage of the *Kämpferi* race, is a beautiful violet-flowered plant, and revels in bog land, as does a beautiful form of it, *alba purpurea*. By the way, there are two forms of this plant in existence, that recognised by the Royal Horticultural Society some years ago as "*Colchesterense*" being quite distinct and infinitely the better plant.

*Iris fulva*, a reddish copper-coloured plant, I have known make its way into a wet ditch and flower beautifully.

There are other irises for the waterside, but those enumerated should suffice as a nucleus, and the only other I will mention is *pseudacorus*, the wild flag of our English waterways, which will grow admirably in the water, but if allowed to do so will take possession of all the area in its neighbourhood. There is a variegated form of it that is very effective by the waterside and should always be included in any planting. Many people do not care for variegated plants in the ordinary way, but this is one of the exceptions that can be admitted with no fear of its offending in any form. This also applies to another variegated form of a native species, *I. foetidissima aurea*.



PRIMULA SIKKIMENSIS, A SOFT LEMON YELLOW.



So far I have only mentioned summer-flowering plants, the iris beginning in late May or early June and flowering until the middle of July. Astilbes and spiræas begin in late June and flower on through July and August. Lilies, late June, July and August.

The primulas, however, will fill in the space during the earlier weeks, and no genus offers such a wealth of brilliant colour. First there is *Primula rosea* that will remain submerged during most of the winter and then thrust up its dainty pink flowers as soon as the water recedes and the sun shows itself in the spring. This is followed closely by *P. denticulata* in mauve and lilac shades, some modern seedlings being deep rich purple. *P. kashmiriana* is a form of this species with flower-stems and the ribs of the foliage much powdered with fine silvery dust or meal, and has been known to grow 2ft. high and as much across. *P. pulverulenta* is perhaps the most telling of the whole species, with its giant whorls of deep crimson flowers on stems 3ft. high, in May and June. The leaves and calyces in this also are beautifully coated with farina. *P. Helodoxa*, introduced from China by Forrest some years ago, is a wonderful plant with bright golden yellow flowers. It made its *début* with acclamation, and was hailed with delight as a promising parent and a permanent addition to the bog garden. So far it has proved neither permanent nor parentally inclined. I have known of many attempts to cross it with other species, but none that has been successful has come to my notice yet, and yet if one could only get it to cross, what a wealth of beautiful forms might emanate from the results!

*Primula japonica* is a rampant grower where it does well, and has produced, in addition to its own crimson, many variations of colour, some of which are better than the type, many are inferior and a few are of a negligible attraction. *P. Beesiana*, purple, and *P. Bulleyana*, orange, are two other Chinese species that must be included. *P. sikkimensis*, with its tall, graceful stem and soft yellow flowers, is always welcomed.

And now what shall I say of the numerous hybrids, *pulverulenta* ×, *Cockburniana* ×, *Bulleyana* ×, *Beesiana* × and all the other crosses. They are exceedingly beautiful, many of them, but it is folly to mention by name plants that may only be a memory when these lines are in print. Some few are, shall I say, partially perennial, and these may be propagated true. Many are biennial, and these can only be raised by seed. The result is that many have been named and in about the second or third generation have ceased to exist, as they produce every imaginable variation.

The primulas bring us very near the water's edge, so while here we may as well notice other plants that like a similar position. Such are the calthas (marsh marigolds), of which the two best are the old *Caltha palustris* fl. pl. and the larger-leaved, bolder-habited *C. polypetala*. Both grow well in shallow water or along the wet banks, and their golden glow is very valuable in the early spring.

The marsh musk, *Mimulus luteus*, and hybrids between this and *M. cupreus* are invaluable, as they flower throughout the summer, and common as *M. luteus* is, I know of no finer combination than its pure yellow mingled with the light blue of the water forget-me-not (*Myosotis semperflorens*) at the water's edge. *Polygonum bistorta*, a pretty pink moisture



ASTILBES IN THE EVENING LIGHT.

loving knotweed, is another desirable plant. Indeed, all the polygonums are happiest in moisture. *Astrantia carniolica* (masterwort) also likes the water's edge. Epimediums, for the beauty of their foliage as much as for their dainty flowers, should be planted freely as a carpet to other plants. The lythrums (purple loosestrife) give a glow of rich purple or deep rose late in the year that mingles charmingly with the earlier changing autumn foliage in the water garden. *Lysimachia* (yellow loosestrife) in several species are useful, but should not be planted too freely, as they are certainly somewhat aggressive, a remark that applies to the purple loosestrife also. *Pimpinella magna rosea* (the Burnet saxifrage) with its umbels of rosy flowers is a good late summer plant.

All the ragworts, or senecios, have bold, handsome foliage as well as large showy flowers. *S. Clivorum* is worth planting for its foliage alone, but when covered with great golden flowers is telling indeed. *S. japonicus* (syn. *Erythrochaete palmatifida*) is equally beautiful and grows taller. *S. tanguticus* is better for foliage than for flowers.

GEO. DILLISTONE.

(To be continued.)



IRIS KEMPFERI BY THE WATERSIDE.



# THE GARDENS AT OLYMPIA

IN this year, at the Ideal Home Exhibition, if not before, the nurserymen who lay out gardens have certainly excelled even their efforts at Chelsea. Naturally, at Olympia they know that they are not hampered by the weather, and so they can allow themselves a certain freedom of action; on the other hand, they have here nothing but a concrete floor to work on. The standard at Olympia has been improving every year, and this year, on the whole, it has reached a height which it would be hard to better. The only criticism that can be made is that in one or two cases the plants have been packed too tightly together in the beds. A realistic garden is being aimed at, so why crowd the plants to such an extent that they could never exist in reality in such mass

Of the more ambitious by far the most effective lay-out is the garden designed and made by Messrs. Carter. This represents a formal Riviera hillside garden and, is probably the best garden that has ever been staged at an exhibition or show. In the making of this garden Messrs. Carter have gone to an immense amount of trouble and expense; as an example, over 150 loads of earth have been carted into Olympia for this one garden; but a little examination will show that, given a slope and leaving out the garden house, such a design would not be expensive to execute, while its effectiveness is undoubted. At the back is a terrace, on which are flowering azaleas and flowering cherries like *Prunus triloba*, while on the sloping sides are planted conifers of various

ground are groups of daffodils flowering in turf. The beauty of this garden is the way in which the actual terracing around the central theme of the fountain gives way to the slope of the bank in the most natural manner possible. On the slope on either side of the central terrace are planted further groups of azaleas. We have nothing but praise for the general lay-out and planting of this garden, and it reflects great credit on Mr. Bard and his staff for producing such a fine exhibit. Messrs. Carter have also designed Messrs. Lyons' Japanese tea-garden, but this is more a conventional design, although quite effective.

Another effective garden is that of Messrs. Cheal. Here the design is quite conventional and formal, but the result is excellent. In the centre is a rectangular plot with a stone path running up the middle and four beds of different-coloured hyacinths in bloom. Surrounding this plot is a narrow border devoted to low-growing shrubs such as skimmias, *Andromeda calyculata* nana, and azaleas, among them *A. Ribiera* with semi-double tubular flowers of a bluish white. This belongs to a group of azaleas that might be more often grown in gardens. This border in turn is backed by a row of yews, while at the back is a small terrace on which are also planted shrubs like lilacs and *Viburnum Carlesii*. This is a type of garden that is particularly well suited for small areas. The central beds can be filled several times during the season, while the shrubs can be so selected as to give the maximum amount of colour throughout the year.

Messrs. Allwoods' are showing a novel design for a carnation and pink garden where the maximum amount of effect can be given with the minimum amount of labour. This is composed of twin lines of double banks, each surmounted with a low wall. These banks have a very moderate slope and have beds cut in them for carnations and pinks. The result of this gentle slope is that the whole contents of the bed can be viewed from the right angle of vision. We cannot remember ever having seen such a design before.

Of rock gardens we consider that Messrs. Maxwell and Beale's is the most effective but is closely followed by that laid out by the Orpington Nursery Company. The latter has an advantage, for it is laid out at the side of the hall, and thus has a background; while the former is in the middle and has to be a complete entity. Messrs. Maxwell and Beale's exhibit consists of a small stone-flagged court with tulips in beds, a terrace of untrimmed stones planted on the top with polyanthus and a very naturally planted rock garden at the back. It is not overcrowded, and the groups of erica, primulas and so on are very effective. The Orpington Nurseries exhibit an alpine meadow with a little stream and rocky pools. The central theme of this exhibit is heather, plants of which are scattered promiscuously in the grassy levels. A background of pines and silver birches lends a realistic touch to the scene.

A small rockery populated by dwarf shrubs, primulas, mossy saxifrages, *Muscari Heavenly Blue*, giving a fine blend of colour, is one of the features arranged by the Central Garden Supplies, Limited. The other part of the exhibit consists of two or three beds filled with early-flowering shrubs such as *Forsythia intermedia* and *Prunus triloba*, which are mingled with the brilliant colours of hardy azaleas and *Rhododendron præcox*. A new idea in window-boxes is also shown by this firm. These could be termed portable rock gardens. They can be made in any shape or size to suit all windows and crannies. They



THE STRICTLY FORMAL GARDEN OF MR. G. WHITELEGG.



A RIVIERA HILLSIDE GARDEN AS DESIGNED BY MESSRS. CARTERS'

formation. It is true that the appalling season has reduced plants in flower to a minimum, but overcrowding is worse than too sparse planting, for in the former all plants lose their individuality, which should only be the case in annuals and a few exceptions in shrubs and herbaceous plants.

kinds. Below the top terrace is a second one, which is made on a curve. In the middle of the curve is a circular pool, with a many-sprayed fountain, which is surrounded by hybrid *Primula malacoides*. The overflow from the fountain splashes into a formally designed tank at the base, while in the immediate fore-



No. 3



The  
Headmaster

# Men who appreciate The **ATCO** MOTOR MOWER

The letter reproduced above, received from the Headmaster of one of many public schools at which the ATCO Motor Mower is used, is but another proof of the value of this machine wherever there is grass to keep in order.

16 inch **£50** 22 in. Model **£75**. 30 in. Model **£95**.  
Model Personally Delivered and Guaranteed 12 months

Send for free booklets "Turf Needs" and "Notes of Praise"

**CHAS. H. PUGH, Limited**

Whitworth Works, 31, Tilton Road, BIRMINGHAM.

HEAD MASTER,  
F. T. PENNINGTON.

TELEPHONE 11621.

ARNOLD HOUSE SCHOOL,  
SOUTH SHORE,  
BLACKPOOL.

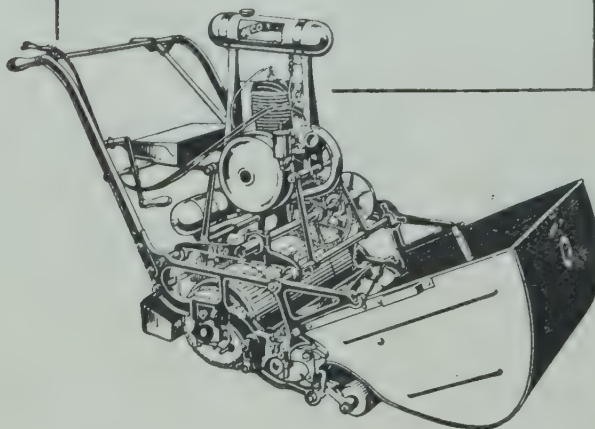
12th February, 1925.

Messrs Charles H. Pugh Ltd.,  
Whitworth Works,  
Tilton Rd.,  
BIRMINGHAM.

Dear Sirs,  
I have used one of your 22" "Atco" Motor Mowers for the last two or three seasons, and have found it very satisfactory. Lawns which I had the greatest difficulty in getting mown once a week are now mown in one day without any trouble. There has been no breakdown of any moment, and I consider the "Atco" Mower an efficient machine fulfilling the claims that are made for it.

Yours faithfully,

*F. T. Pennington*



## ANEMONES

GILL'S

Giant Single Poppy Anemones

*FINEST STRAIN EXISTING.*

*Unequalled for  
Brilliance and Richness of Colour.*

*Size of Flower.*

*Vigour of Growth and Free Flowering Qualities.*

*Earliness and Continuous Flowering Period.*

The Flowers of our Strain are single with large Petals and produced on long stems. Colours range from deepest crimson to purest white, embracing such delicate shades as cobalt, scarlet, salmon-pink, rose, heliotrope, etc. These Anemones must not be confused with the St. Brigid strain, which are of a narrow petal semi-double flower. Ours are well known, having been exhibited at most of the principal Shows, where they have received the highest awards, including CUPS, GOLD AND SILVER MEDALS, etc. Absolutely unsurpassed as a cut flower or for the Plant Border.

Strong well-grown corms at

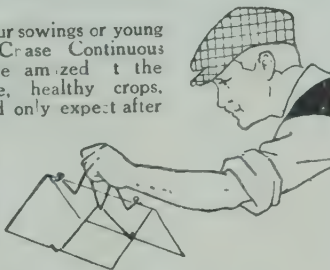
**12/-** per 100, **£5** per 1,000

**ORDER NOW!**

**R. GILL & SON, FALMOUTH.**

## Would you like to have Fine Crops whatever the weather?

Then just cover your sowings or young plants with the Chase Continuous Cloche. You'll be amazed at the results—big, fine, healthy crops, such as you would only expect after many weeks of perfect growing weather. For protecting and maturing almost all vegetables the Chase Continuous Cloche



entirely supersedes the  
old-fashioned frame

**For General Use**  
Send for this case of  
"A" pattern Cloches.  
Each Cloche 7 ins. high.  
Case contains 12  
Cloches, enough to  
cover 14 feet. **18/-**  
Carriage Paid.  
**For Larger Plants**  
order "B" Cloches.  
9 ins. high. Set of 15,  
enough to cover  
22 1/2 feet. Price: **35/-**  
Carriage Paid.



Reduction  
for larger  
quantities.  
Carriage  
cotland 2d.  
a 1/- extra.

Plans grown under the Chase Continuous Cloche are not only completely protected from cold or wet weather. At the same time they are always freely ventilated, which makes them naturally hardy, so that there is not the slightest check to their growth when the Cloche is removed.

**Write now for  
FREE BOOKLET  
No. 7**

containing full particulars and prices, to—

**Chase Continuous Cloche**  
*A Trap to catch the Sunbeams*

Dept. 7, Chertsey, Surrey



## SPECIAL OFFER

**Anemone fulgens**  
(The Scarlet Windflower)

Per 100, 14/- per doz., 2/-

**Anemone Gt. Excelsior, mixed**

Per 100, 10/6 per doz., 1/6

**Gladioli Excelsior, mixed**  
(From named varieties)

Per 100, 11/6 per doz., 1/6  
*Special List on application*

**Gladioli Primulinus**  
(Charming new race)

Per 100, 9/- per doz., 1/6

**Lilium speciosum Krætzneri**  
(Very scarce, fine bulbs)

Per doz., 16/- each, 1/6

**Lilium speciosum magnificum**  
(Most brilliant of the speciosums)

Per doz., 15/- each, 1/6

*Orders of 5/- and over carr. paid  
Under 5/- 6d. should be added for postage  
Seed and Bulb Catalogues free*

**ALFRED DAWKINS**

17 years Manager, Seed and Bulb Dept.,  
**JAMES VEITCH & SONS**  
408, King's Road, Chelsea  
S.W.10

*Please mention THE GARDEN when writing.*



# THE Douglas Cloves

Rigid stems, perfect calyx, glorious scent, continuous flowering.

The Douglas Cloves are now grown in every garden where fragrant and beautiful flowers are cherished. We have the largest and best grown stock in England, now ready to plant out. Our stocks give satisfaction in every part of the United Kingdom.

*The house of Douglas has received more awards of merit of the Royal H. Society for Carnations than any other three firms collectively.*

Extract from *The Times* :

Mr. Douglas is the leading raiser of this flower, as his father was before him. His wonderful strain of new Cloves is superb, and whatever may be said of loss of scent in some modern roses, it cannot be levelled against Mr. Douglas' new creations in Carnations.

**Bookham Orange**, a wonderful flame orange, huge flowers of perfect form. The best yet raised, 5/- each.

**Coral Clove**, a wonderful novelty for Border or Rockwork, rigid, 12in. stems, large flowers of perfect calyx. Coral pink, true colour, 5/- each.

The following set is a perfect Border Collection and will do well in any part of Great Britain the year round. All are gloriously clove-scented.

## SET A.

**Wonder Clove**, scarlet red flowers, 4ins.

**King of Cloves**, wine-coloured; wire-like stems; most beautiful.

**White Clove**, huge flowers, dazzling white.

**Blush Clove**, charming blush, height 18ins.

**Claret Clove**, wonderful doer, one of the best.

**Damson Clove**, plum-bloom blue.

**Fairy Clove**, salmon, glorious scent.

**Coral Clove**, fascinating coral pink.

**Purple Clove**, a noble flower, true purple.

**Spicy Breeze**, maroon old clove colour.

**Steerforth Clove**, huge flowers, white splashed red.

**Bonny Clove**, pale lilac rose.

This set, in grand plants, 25/-, carriage paid.

## SET B.

**Crystal Clove**, pure white.

**Brunetto Clove**, almost black.

**Pearl Clove**, lilac blush.

**Maroon Clove**, old clove colour flowers, 4ins.

**Mrs. Hawkesbee**, pure white barred rose.

**Paladin**, yellow, pencilled purple-blue.

**Douglasdale**, vermilion-orange.

**Charmian**, apricot, beautiful.

**Penelope**, plum blue, striped rose.

**The Banner**, scarlet, noble flower.

**Miranda**, rose pink, lovely.

**Narcissus**, yellow, clear and fine.

This set, in best plants, 18/6, carriage paid.

## DOUGLAS' IRIS.

We send out the largest plants in the trade, which flower at once.

**Black Prince**, deep black purple, 18ins.

**Blue Bird**, lovely pale blue, scented, 2ft.

**Butterfly**, lovely golden yellow, 12ins.

**Darius**, lilac, wonderful colour, 18ins.

**Innocence**, pure white.

**Lavinie**, heliotrope, scented.

**Nosegay**, dark blue, 18ins.

**Perrow**, sulphur yellow.

**Queen of May**, soft rose pink, 2ft.

**Proserpine**, purple maroon.

**Victorine**, white, splashed blue.

**Phidias**, maroon and yellow.

The above dozen, in largest plants, 16/-, cart. paid.

If the above list of Carnations does not meet your views, please send for our catalogue with 12 coloured illustrations.

**J. DOUGLAS,** *The Premier House for Carnations,*  
**Edenside, GT. BOOKHAM.**

Please mention THE GARDEN when writing.

# BORDER CARNATIONS

WE have never had a dissatisfied customer, and scores of the keenest growers declare we have the cleanest, healthiest, and strongest plants in the kingdom.

Wherever Border Carnations are shown our plants secure the leading awards and prizes.

This is just the time to plant, and we can give quick and highly efficient service.

Dozen collections of very choice varieties 11/6, 16/6 and 22/6 free to any address in Britain :: ::

Our special "Clove" collection in a dozen different colours, 21/- post free :: :: ::

CARNATION SEED. 120 Seeds, 5/- 50 Seeds, 2/6

THERE IS NO BETTER SEED IN THE WORLD

**LOWE & GIBSON, Crawley Down, SUSSEX**

## FISON'S FERTILIZERS

FOR GARDEN AND GREENHOUSE Established 80 years  
GUARANTEED ANALYSIS

Lawn Guano ... 25/- per cwt., carr. paid  
Rose Fertilizer ... 25/-  
and many others "

Full particulars in pamphlet sent in course of post

**JOSEPH FISON & CO., LTD.**  
Fertilizer Manufacturers IPSWICH

## THE FLORAIRE NURSERIES

(H. CORREYON, PROPRIETOR.)

Chene-Bourg, near GENEVA (Switzerland).

The OLDEST FIRM for ALPINE PLANTS.

## ALPINE PLANTS

Grown from seed and acclimatised for English Gardens.

**SEEDS** Of all Alpines, Shrubs and Perennials, for Rock Garden, Herbaceous Border, &c.

The most complete collection including many rarities not to be had elsewhere.

APPLY FOR CATALOGUE.

"NEVER WORKED SUCH A SATISFACTORY AND ECONOMIC GREENHOUSE HEATING APPARATUS AS YOUR

## 'HORSE SHOE' BOILER"

WRITES ONE OF THE MANY ENTHUSIASTIC OWNERS.

"I have two, one heating a long Vinery and one a little Hothouse. Last autumn 12/- worth of slack finished off the Grapes, and we sold £3 worth, besides what I gave away. This spring all seeds raised in a case over the boiler in the hothouse fires settled up about 5.30 require no attention till 7.30 next morning. I thought we ought to let you know this."—May 7th, 1924. Miss—, Traverstown, Nenagh, Co. Tipperary.

Why not investigate the sterling qualities of the "HORSE SHOE," and get that heating proposition settled now?



Used in the R.H.S. Gardens

To CHAS. P. KINNELL & CO., LTD.,  
Engineers, Southwark Street, S.E.1.

Please send me Booklet E "Making the most of your Greenhouse," and price of complete outfit to suit (span-roof) (lean-to) greenhouse.....long  
.....wide inside, sides of (wood) (brick).....thick

Name.....

Address.....

\*Strike out particulars not needed. Cut out and send by 1d. post.

Wire:  
"Kinnell-Boroh-  
London."

**CHAS. P. KINNELL & CO., LTD.**  
65, SOUTHWARK STREET, LONDON, S.E.1

\* Phone:  
Hop 362  
(Three lines).

Please mention THE GARDEN when writing.



are made of wood which is painted a remarkably true stone colour, and are to be had either lined with zinc or unlined. When filled with dwarf plants they have a very attractive appearance, and will give excellent service for a number of years even without a lining of zinc. From a decorative point of view they will prove of value in a house with many windows and odd corners.

Mr. George Whitelegg has fully attained his object in presenting a most realistic garden with a simple and effective yet formal design. There is nothing lavish or ornate in the design, with a pergola at one end, through which one catches a vista of a water pool with a fountain at the other end. On either side there are paths bordered by beds of early-flowering shrubs and hardy azaleas. A fine colour effect is obtained by the free use of red dwarf azaleas intermingled with taller plants of the brilliant lemon yellow Anthony Koster backed by evergreen shrubs such as cupressus and skimmias. The other bed contains some fine plants of Viburnum Carlesii of an ideal height and in full flower. It is undoubtedly one of the most attractive species in the genus, and visitors will realise its beauty when planted in a border, especially when it is allowed full play to exhibit its individuality, as in Mr. Whitelegg's exhibit. The full effect of this garden is obtained through the judicious arrangement of the shrubs and flowers and the formal design in the lay-out of the paths and beds.

An essential feature in any English garden of any extent is that part devoted to roses, and one always looks for its representation at an exhibition. At Olympia one is not disappointed, as a rose garden, complete in every essential detail and laid out to full size, is designed and exhibited by Mr. Reginald Winder. A series of terraces leading down to the centre of the garden form the chief feature. This, while being simple, secures shelter without the use of high screens. The beds of roses are kept in position by means of low brick retaining walls, which lend a pleasing touch of colour and should prove handy in providing a nook for creeping and trailing plants which will prove an added joy in spring before the roses are out. The main paths are of red brick, into which formal patterns of cobble are set, the whole arrangement being attractive and serviceable.

The scent of violets is always pleasant, and when tastefully arranged, as in Mr. Baldwin Pinney's exhibit, they provide an



A MINIATURE ROCK GARDEN IN A WINDOW-BOX.

attractive feature. Beds of primulas and violets are set off to advantage by stonework and quaint figures supplied by the Leckhampton Quarries Company, Limited.

The St. Brigid strain of anemones is coming more into favour with the public these days, and Messrs. Reamsbottom's exhibit will do much to increase the popularity of these blooms. When planted out in formal beds, as this firm show, few flowers can compare with them for wealth and variety of colour. In addition, they are excellent for cut-flower purposes.

Messrs. Russell of Richmond show a choice selection of early-flowering and forced shrubs, such as camellias, acacias, azaleas and prunus, bordered by Primula The Jewel and the Lingwood variety. The exhibit loses much of its effect by being overcrowded and situated in a corner. It is always the tendency to crowd much into a little space, with the result that the plants lose their individuality.

In the centre of the hall, a garden of formal design is laid out by Clayton and Hammond, Limited, designed by Miss B. Colvin. A pool in the centre, with four plants of Skimmia japonica in fruit, with at one end two beds of bright-coloured primulas, add a certain attractiveness to it.

A moorland scene in the form of an alpine meadow with a pool nestling among banks of rocks forms the exhibit of Captain R. Crewsdon Day. Stretches of Cumberland turf with crocuses in small groups will attract the eye. These crocuses, however, had obviously been spaced by a foot rule. The heaths, such as Erica vagans and mediterranea, are also prominent; while saxifrages such as Sundermanni, Boydii, lingulata and frondosa, clothe what might be termed a rocky moraine. The trouble about this kind of garden is that it is next to impossible to cut the grass with a lawn mower; successful clipping is only accomplished by hand with a pair of shears.

An example of a garden formed of dry walls surrounding a paved octagonal court, designed by Mr. Ernest Dixon of West Hill Nurseries, Putney, could have been much more interesting and attractive by a more choice selection of early flowering subjects. Such plants as wallflowers are scarcely suited for dry wall gardening, especially since they were overshadowed by the surrounding shrubs, a feature that would be rarely seen in any outside garden. Included in the exhibit is a rock garden of a more natural design, filled with many dwarf shrubs and alpine.

## SPRING FLOWERS AT VINCENT SQUARE

GRADUALLY, as the days come round and winter gives way to spring, the story of the change is fully evident on each succeeding occasion of the Royal Horticultural Society's Meeting. On March 10th last one felt like echoing the Geisha girls in the "Mikado" and singing of "the flowers that bloom in the spring tra la" on entering the hall. What a beautiful and wonderful display the spring flowers truly make with their charming soft and pleasant colours, and, above all, with that freshness which is the hall mark of the season. Alpines were well represented, including flowering shrubs suitable for the rock garden, carnations, orchids, cyclamens, roses, but undoubtedly the main feature was the exhibits of forced bulbs of tulips, hyacinths and narcissi which provide such an artistic show with a wealth of bloom and colour.

A striking display of hyacinths was staged by Messrs. Carters. Arranged in bold masses, as if they were bedded out, the whole group made a vivid patch of contrasting colours. The flower-spikes were long, the growth vigorous, and the colours bright and clear, those harsher in shade being softened down by the paler varieties. Duchess of

Westminster, a purplish blue, and City of Haarlem, a cream, blended well together. All of the varieties were good, and to mention a few used, Dr. Leiber, Corregio, La Victoire, Lady Derby and Bismarck have been selected.

The seedling narcissi of Messrs. Barr and Sons again attracted much attention. Messrs. R. H. Bath were showing bulbs grown in fibre. Of this exhibit, the tulip Le Rêve was decidedly the best. It is a charming colour, a salmon pink slightly shaded with mauve and bronze at the tip of each petal, and is also good in shape and form. Messrs. J. R. Pearson and Sons, Limited, who exhibited an excellent collection of narcissi, had among them some beautiful white forms. The texture and purity were considerably above the average white trumpet narcissus. White Dame and Sanctity were both pure white and vigorous in growth. The drooping habit of the flowers of Sanctity was attractive. Some of the varieties although not perfectly white, were no less beautiful. Phantasy was creamy white with flowers on long stalks, and Capella had a very pale yellow trumpet surrounded by a pure white perianth. Mixed with any of these, the varieties exhibited with a deep orange cup

such as Marshlight or Sunrise looked most effective.

A distinct patch of colour which caught the eye was that produced by the exhibit of Freesia Wistaria by Mr. G. H. D. Dalrymple, which decidedly deserved all the attention it attracted. The quality of the individual blooms was well seen even although they were arranged *en masse* with no varieties of other colours as a relief. The flowers were of a delicate shade of clear mauve, which merged gradually into lighter hues in the throat. The variety is, indeed, well named, as it is a true replica in colour of Wistaria chinensis. The flowers are of large size, measuring some 3½ ins. long and almost 1½ ins. across, and as many as five to six individual blooms are carried on each tall and erect stem, which varies from 18 ins. to 24 ins. in height. The flowers also possess a sweet haunting fragrance. Wistaria certainly represents a great advance in the world of freesias, especially if it remains true and does not, as has been the case with many other varieties, produce a whole heap of "duds." For decoration and cut flower purposes it should prove of extreme value.



There was not a great deal new or noteworthy among the rock plants, but the benches were gay with the early wild narcissi, "blue" primroses and the many hybrids of *Primula juliae*. Of quite different charm is the lilac primrose (rather doubtfully called *Primula altaica*), which replaces the yellow form on the eastern fringe of its distribution. This was shown by Messrs. Prichard, who also exhibited a striking new saxifrage of their own raising—*S. His Majesty*—which is in effect a magnified *S. Burseriana* with glandular orange stems and a pronounced ring of brownish orange at the insertion of the stamens, both together giving a warm tone to the great white flowers. These are large enough to have sacrificed the neatness of a true alpine for a more ostentatious beauty. The parentage is interesting and unexpected, for the plant is a cross between the hybrid *R. V. Prichard* (*S. Burseriana* *Gloria* × *lilacina*) and *S. lilacina*, though the influence of *lilacina* shows only in the tightness of the rosette and a faint pink flush in the bud.

Messrs. Tucker of Oxford showed a good pink hybrid of *Sundermanni* in *S. Arco-Valleyi*, which is very like *S. Jenkinsæ*, but, perhaps, rather neater, and the petals are more overlapping. With it was shown Farrer's *S. Myra*, that probably owes its deep cherry red to *S. Scardica* (*S. erythrantha*). *Tulipa Clusiana*, perhaps the most graceful of all tulips, made its first appearance this year on the same bench. Its peculiar colouring—white, lightly marked with carmine outside, and carrying a central patch of blackish violet within—is perfectly set off by the slender grey leaves, and it is curious that such a beautiful and distinct tulip is comparatively seldom grown, for it is much easier than many of the species. *Stylophorum diphyllum*, with rough, divided leaves and poppy flowers of uniform deep yellow, was shown by Messrs. Waterer.

Among the other exhibitors were the following:

**ANEMONES.**—Messrs. Reamsbottom and Co., and R. Gill.

**CARNATIONS.**—Messrs. Allwood Brothers, C. Engelmann, and Stuart Low and Co.

**CYCLAMEN.**—Caledonian Strain Floriculturists.

**FORCED SHRUBS.**—L. R. Russell.

**FRUIT.**—Messrs. Bunyard, and Westmacott and Co., Limited.



THE OUTSTANDING FREESIA  
WISTARIA.

**IRIS.**—Messrs. Lowe and Shawyer, and Van Waveren, Limited.

**ORCHIDS.**—Colonel S. R. Clarke, C.B., Messrs. Charlesworth, Cowan and Co., J. and A. McBean, H. T. Pitt, Sanders, and Stuart Low and Co.

**POLYANTHUS AND PRIMROSES.**—Messrs. G. A. Miller, and K. and E. Hopkins.

**RHODODENDRONS.**—Messrs. R. Gill and Son.

**ROSES.**—Messrs. Elisha Hicks and George Prince.

**SAXIFRAGES.**—W. Wells.

**SHRUBS AND ALPINES.**—Messrs. Bakers, Barr and Sons, Carter Page, W. Cutbush, H. Hemsley, G. Reuthe, Skelton and Kirby, Waterers and F. G. Wood.

**VIOLETS.**—Misses Allan-Brown and Mr. Baldwin Pinney.

## NEW AND RARE PLANTS.

**NARCISSUS MEDUSA.**—This is an excellent variety where the flowers are of good size and shape. The perianth is more or less whitish in colour, while the compact and cupped corona stands out in sharp contrast, being of an almost fiery orange shade. It is of a colour which is often associated with some of the best poeticus varieties. Award of merit by the Narcissus Committee. Shown by Mr. P. D. Williams, Lanarth, St. Keverne.

**NARCISSUS GODOLPHIN.**—Although this variety undoubtedly has merits as a garden flower, it appears to be eminently suitable for market purposes. It is a large trumpet variety of a rich yellow in colour. The perianth and trumpet are remarkably pure, and are of good substance and texture. The individual blooms are large and handsome, and carried well on long stems. Award of merit by the Narcissus Committee. Shown by Mr. P. D. Williams.

**SALIX GRACILISTYLA.**—This species is a native of Japan and Manchuria, and was introduced to this country about 1895. Judging from the naked shoots bearing catkins which were exhibited, it is of extreme beauty when in flower. The catkins, which are borne from now till April, vary from 1 in. to 1½ ins. in length and about ¼ in. broad. When unopened they are a silvery grey colour, being covered with a thick coating of fur. As they open the crimson anther heads dangle freely and loosely from the compact tassel and gradually assume a golden yellow colour as they become covered with their powdery pollen. Only the male catkins were shown. Award of merit. Shown by the Hon. Vicary Gibbs.

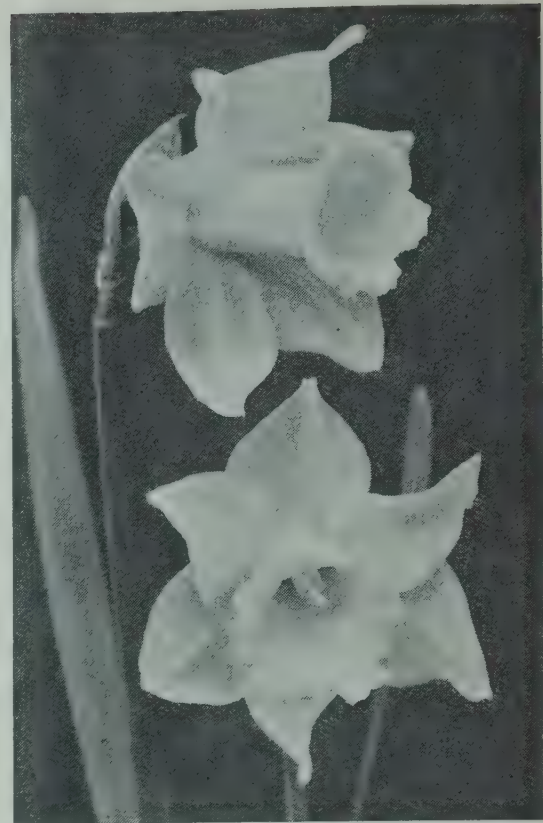
**RHODODENDRON LEONARDSLEE GEM OF THE WOODS.**—Fairly large pure white bell-shaped flowers, borne two or three together at the ends of the branches, are the characteristic features of this variety. The leaves are of a deep green colour and hairy on the upper surface. Award of merit. Shown by Lady Loder, Leonardslee, Horsham.

**COLUMNEA BANKSII.**—This is a representative of a genus of tropical American evergreen shrubby climbers which are excellent as subjects for decoration under glass. With their handsome scarlet flowers often, as in this species, almost 2 ins. long, gaping at the apex, and their lolling, trailing or pendent branches bearing small opposite evergreen leaves they should be more generally known. Cultural commendation. Shown by the University Botanic Garden, Cambridge.

## ORCHIDS.

**MILTONIA BEAU BRUMMELL PITT'S VAR.**—A charming form of this hybrid, the young plant bore a couple of flowers of purplish rose colour, the expansive labellum freckled with lighter spots. First-class certificate. Shown by Mr. H. T. Pitt, Rosslyn, Stamford Hill, London, N.

**CYMBIDIUM FLAMINGO ROSEUM** (Merlin × *Alexanderi*).—The erect spike carried four



NARCISSUS GODOLPHIN, GOLDEN YELLOW

large flowers in which the segments were stiff and flatly displayed; in fact, the flowers had the formation of the well known *Cattleya Loddigesii*. Of blush rose tint, the labellum with light crimson markings on the front lobe and the column rose coloured. First-class certificate. Shown by Lieutenant-Colonel Sir George Holford, K.C.V.O., Westonbirt, Tetbury, Gloucestershire.

**CYMBIDIUM BULLFINCH VAR. BRILLIANT** (*Alexanderi* × *Garnet*).—The spike bore seven flowers of a yellowish hue heavily lined and suffused with reddish rose, the labellum whitish and with the front lobe of deep crimson. Award of merit. Shown by Lieutenant-Colonel Sir George Holford.

**CYMBIDIUM MIRANDA, WESTONBIRT VAR.** (*Alexanderi* × *Lowio-grandiflorum*).—This showy hybrid bore an arching spike of twenty-one large flowers of yellowish colour, the labellum white, and having crimson-red lines on the lateral lobes and a solid blotch of the same colour on the front lobe. Award of merit. Shown by Lieutenant-Colonel Sir George Holford.

**CYMBIDIUM ALEXANDERI, OVERLEA VAR.**—A robust plant of this well known hybrid, the two arching spikes bore a total of nineteen flowers of a pretty blush pink colour, the labellum having a few reddish markings and the column rose coloured. Award of merit. Shown by Messrs. J. and A. McBean, Cooksbridge, Sussex.

**CATTELYA JUPITUS** (*Edith* × *Tityus*).—This elegant novelty bore two flowers with the segments broadly developed and compactly arranged, of rosy mauve colour, the petals crisped at the margin, the labellum having the large front lobe of crimson-purple. Award of merit. Shown by Messrs. J. and A. McBean, Cooksbridge, Sussex.

**CYMBIDIUM TITYUS** (*Alexanderi* × *Woodhamsianum*).—The long spike of this new hybrid carried several flowers of delicate creamy white tint, the labellum rendered conspicuous by the bright crimson markings on the outer margin. Award of merit. Shown by Messrs. Armstrong and Brown, Tunbridge Wells.

**LÆLIO-CATTELYA H. T. PITT VAR. SUPERBA** (*C. Enid* × *L.-C. Bella*).—This promising hybrid had well formed segments of rosy mauve colour, the expansive labellum rich crimson and with a yellowish disc on each of the side lobes. Award of merit. Shown by Messrs. Flory and Black, Slough.



# GIGANTIC SALE OF HARDY PLANTS

ON the break up of some of the largest and finest Herbaceous Borders of the country, we have purchased huge quantities of HIGH-CLASS HARDY PLANTS. As there are thousands more than we can accommodate in our own Nurseries we have decided to offer a few BARGAINS to our Customers. All orders will be delivered in strict rotation so long as unsold.

Any Quantities supplied at the following rates:—

	Per doz. s. d.		Per doz. s. d.		Per doz. s. d.
<b>GRAND GARDEN CHRYSANTHEMUMS</b>	3 3	<b>ERIGERON—continued.</b>		<b>PYRETHRUM (Single)—continued.</b>	
For delivery now or in May.		— SPECIOSUM SUPERBUM, fine lilac	4 6	— (DOUBLE) APHRODITE, pure white	7 6
<b>ANCHE POITOU</b> , immense white	3 0	— ERICAS (Hardy Heaths), in 6 distinct sorts	6 0	— ARGENTINE, flesh-white	7 6
<b>CHOCOLATE SOLDIER</b> , new chocolate	5 0	<b>GAILLARDIA MRS. LASCELLES</b> , scarlet, yellow edge	6 0	— LORD ROSEBERRY, brilliant carmine, fine	8 0
<b>MON M'ALPINE</b> , free and hardy	3 0	— MRS. MACKELLAR, immense crimson	6 0	— J. N. TWERDY, large crimson and gold	7 6
<b>VEL</b> , pink spotted white, unique	3 0	<b>GAILLARDIAS</b> in mixture, showy and varied	2 9	— QUEEN MARY, largest and best pink	6 0
<b>FIELD EARLY WHITE</b> , popular	3 0	<b>GALEGA</b> , LADY WILSON, beautiful lavender	5 0	— CAPT. NARES, fine crimson	6 0
<b>RGE BOWNESS</b> , crushed strawberry	3 0	<b>GYPHOPHILA PANICULATA</b> , decorative	2 6	1 each, 3/9; 3 each, 10/-; 12 distinct, 7/6.	
<b>CHER'S CRIMSON</b> , best dark	3 0	<b>GEUM</b> , EARLY BEAUTY, yellow, for rockery	3 9	<b>RUDBECKIA CALIFORNICA</b> , tall single yellow	5 0
<b>ACE MARTIN</b> , fine golden yellow	3 0	— HELDREICH MAGNIFICUM, fine orange	5 0	— GOLDEN GLOW, splendid double yellow	5 0
<b>N M'ALPINE</b> , salmon, most lovely	3 0	— LADY STRATHEDEN, yellow "Bradshaw"	4 0	— NITIDA, (Autumn Glory), rich yellow	7 6
<b>MANDIE</b> , best pink, very free	3 0	— MRS. BRADSHAW, fine double crimson	4 0	— SPECIOSA (Newmanii), orange, black eye	4 6
<b>IE D'ARGENT</b> , delightful white	3 0	1 each, 1/6; 3 each, 4/3; 12 each, 15/6.		1 each, 1/9; 3 each, 5/6; 6 each, 10/-.	
<b>TEMBER WHITE</b> , massive white	3 0	<b>GLADIOLUS</b> , large flowering, 12 distinct	2 6	<b>SAXIFRAGA WALLACEI</b> , largest white	3 6
1 each above, 3/3; 3 each, 8/6.		— PRIMULINUS, 12 distinct, lovely	3 0	<b>SCABIOSA CAUCASICA</b> , mauve, exquisite	6 0
<b>INGLE GARDEN CHRYSANTHEMUMS, 1/9</b>		<b>HELENIUM AUTUMNALE</b> , yellow	3 9	<b>SIDALCEAS</b> , mixed, from Rose Queen	3 6
<b>SY BELL</b> , lovely pink	3 0	— RUBRUM SUPERBUM, deep red	5 0	<b>SOLIDAGO</b> , in 5 showy varieties	3 6
free-flowering white	3 0	— RIVERTON GEM, wallflower-red	4 0	<b>SWEET WILLIAMS</b> , scarlet, white and pink	1 3
<b>BUS</b> , very fine terra cotta	3 0	— STRIATUM, orange	4 0	<b>TRITOMAS</b> (Red-hot Poker), early or late	5 0
<b>EBRAND</b> , chestnut-crimson	3 0	1 each, 1/3; 3 each, 4/3; 12 each, 15/6.		<b>VERBASCUM</b> , HARKNESS'S HYBRID, tall, yellow	2 6
<b>EDEN GLEAM</b> , grand new orange	9 0	<b>HELIANTHEMUM</b> , red, white, rose, yellow	5 0	<b>VIOLAS</b> for edgings or beds, clumpy roots	1 3
<b>ERWITCH</b> , splendid new white	5 0	<b>HELIANTHUS</b> , giant single Sunflower	5 0		
1 each, 1/9; 6 threes, 4/6; 12 distinct, 3/3.		— SOLEIL D'OR, fine double form	5 0		
<b>OMPON GARDEN CHRYSANTHEMUMS, 1/6</b>		<b>HEMEROCALLIS</b> (Day Lilies) in fine variety	4 0		
<b>TAGE WHITE</b> , very hardy and free	2 9	<b>HEUCHERA SANGUINEA SPLENDENS</b> , scarlet	4 0		
<b>F. LUCKSLEY</b> , bright bronze	2 9	— ROSEA, lovely salmon-rose	5 0		
<b>RA</b> , hardy and free, bright yellow	2 9	— TIARELLOIDES, creamy-pink, charming	5 0		
<b>INTHA</b> , white, shaded pink	2 9	1 each, 1/2; 3 each, 3/3; 12 each, 12/-.			
<b>ADYS GRAY</b> , fine free yellow	3 0	<b>HOLLYHOCKS</b> , double, in fine mixed colours	3 0		
<b>RTINMAS</b> , lilac pink, sturdy	2 9	— single, in fine mixed colours	3 0		
1 each, 1/6; 6 threes, 4/3; 12 distinct, 2/9.		<b>HYACINTHUS CANDICANS</b> (Summer Hyacinth)	3 0		
<b>ILLEA W. B. CHILD</b> , single white, splendid	4 0	<b>FLAG IRIS</b> , in 12 distinct varieties	4 0		
<b>UPATORIUM</b> , showy yellow corymbs	3 0	<b>IRIS OCHROLEUCA</b> , noble plant, pale yellow	6 0		
<b>ARMICA</b> , Perry's White, double	2 6	<b>LUPINS</b> . Harkness's new colours; a really wonderful			
<b>ANITUM FISCHERI</b> , fine soft lilac-blue	5 0	lot of fascinating colours	5 0		
<b>VILSONI</b> , handsome pale violet	5 6	<b>LUPIN BEAUTY</b> , lavender-blue, fine	9 0		
<b>CHUSA MYOSOTIDIFLORA</b> , myosotis-like blue	3 9	— MOERHEIMII, peach and blush, fine	7 6		
<b>ERULA HEXAPHYLLA</b> , improved Gypsophila	4 6	— PINK BICOLOR, pink and white	7 6		
<b>ER</b> (M'as Daisies), CLIMAX, large blue	4 6	— ROSE QUEEN, deep rose self	7 6		
<b>CLOUDY BLUE</b> , double lavender-blue	4 6	— RUBY KING, deep ruby-purple	7 6		
<b>DIADEM</b> , pale lavender	4 0	— WISTARIA, lovely pure lavender	7 6		
<b>GLORY OF COLWALL</b> , double mauve-lilac	4 6	1 each, 3/9; 3 each, 10/6; 12 distinct, 8/6.			
<b>ING OF BELGIANS</b> , huge double mauve	4 0	— rose, pink, blush and salmon shades	2 9		
<b>LIL FARDELL</b> , splendid rose-pink	4 0	— fawn, orange, apricot, copper, etc.	3 6		
<b>ROBINSON, V.C.</b> , fine double blue-mauve	4 0	<b>HARDY MARGUERITE.</b>			
<b>AM BANHAM</b> , immense pure white	4 0	— FIMBRIATA, fringed white	5 0		
<b>ST. EGWIN</b> , vivid rose-pink, dwarf	4 0	— MRS. F. DANIEL, most useful	3 6		
<b>VELL'S WHITE</b> , large useful white	4 0	— MRS. J. TERSTEEG, tall, fine	4 0		
<b>WHITE CLIMAX</b> , one of the best whites	4 6	— MRS. HARKNESS, very refined	5 0		
<b>SUNSET</b> , lovely pale rose	5 6	— SNOWDON, giant white	4 0		
1 each, 4/6; 3 each, 12/-; 6 each, 22/6		— WINNIE STOKES, New, the best	6 0		
<b>MELLUS</b> , in variety, mixed, named	5 0	1 each, 2/3; 6 threes, 6/-; 12 each, 10/6.			
<b>DIPLOSTEPHIOIDES</b> , lavender, best alpine aster	2 6	<b>PENSTEMON, NEWBURY GEM</b> , scarlet	3 0		
<b>ABRIETIA DELTOIDES</b> , neat pale lilac	4 0	<b>ORIENTAL POPPY, JOAN PYBUS</b> , salmon-apricot	4 0		
<b>PURPUREA</b> , purple Rock Cress	3 6	— KATHLEEN, salmon, splendid	4 6		
<b>YBRIDS</b> , in many pretty colours	3 6	— LORD LAMBOURNE, scarlet, fringed	5 0		
<b>CATANANCHE CÆRULEA</b> , sweet Cornflower blue	3 6	— MRS. PERRY, orange-apricot, popular	4 0		
<b>COLOR</b> , pretty white and blue	3 6	— NANCY, huge crimson, the "Lampshade"	5 0		
<b>NATION, FAIRFIELD CRIMSON</b> , hardy	5 6	— REMBRANDT, crimson-scarlet, fine	5 0		
<b>UNTSMAN</b> , brilliant scarlet, fine	5 6	1 each, 2/3; 3 each, 6/3; 12 distinct, 5/6.			
<b>UNTING MORN</b> , lighter scarlet	5 6	<b>PHLOXES, AMAZONE</b> , purest white	5 0		
1 each, 1/6; 3 each, 4/3; 12 each, 15/-.		— ANTOINE MERCIER, lilac, white star	5 0		
<b>PANULA GLOMERATA</b> , fine deep purple	4 6	— BARON V. DEDEM, clear scarlet-red	5 0		
<b>PHINIUM COSSACK</b> , blue, bronze eye	15 0	— ECLAIREUR, large early carmine	4 6		
<b>W. MATTHES</b> , blue, mottled centre	18 0	— F. A. BUCHNER, large, perfect white	5 0		
<b>E RUYTER</b> , violet-blue, semi-double	15 0	— GEN. V. HEUTZ, salmon-red, white star	5 0		
<b>DWIN BECKETT</b> , deep blue, white eye	18 0	— JO. GERBAUD, white, vivid cherry eye	4 6		
<b>DA R. ELLIOTT</b> , large bright blue	15 0	— MONS. KIND, grand orange-scarlet	5 0		
<b>ING OF DELPHINIUMS</b> , large violet	12 0	— MR. M. VAN HOBOKEN, new soft pink	5 0		
<b>RINCE GUSTAVE</b> , deep blue, immense	18 0	— RIJNSTROOM, large handsome pink	4 6		
<b>ADYE FAYRE</b> , lovely lavender	18 0	— ROSE QUEEN, clear pink, crimson eye	5 0		
<b>VETTE QUILBERT</b> , pale blue, white eye	18 0	— THOR, salmon-red, blood centre, grand	5 0		
<b>EV. E. LASCELLES</b> , blue, white cushion	15 0	1 each, 5/-; 3 each, 14/-; 24 distinct, 10/-.			
<b>OSALARE</b> , Cambridge blue, white eye	15 0	<b>POLEMONIUM RICHARDSONI</b> , blue, sweet scented	4 0		
<b>USTER LUGTEN</b> , indigo-blue, intense	15 0	— ALBA, lovely white form	5 0		
1 each, 18/-; 3 each, 52/6; 6 each, 100/-.		<b>PRIMROSES</b> , many colours, including blue	2 6		
<b>ELLADONNA</b> , sky-blue, popular	8 6	<b>PYRETHRUMS (Single)</b> , Comet crimson	7 6		
<b>SEMI-PLENA</b> , most lovely	9 6	— MRS. B. FINDLAY, large rose	6 0		
<b>AMARTINE</b> , intense violet-blue	7 6	— GRANDIFLORA, early rosy-crimson	6 0		
<b>RS. THOMPSON</b> , fine bright blue	8 0	— ELSIE GERTRUDE, large fine blush	6 0		
<b>KY BLUE</b> , pretty new variety	9 6	— GEN. FRENCH, brilliant crimson	6 0		
<b>HEODORE</b> , medium blue, distinct	8 0	— HAMLET, beautiful rose-pink	6 0		
1 each, 5/-; 3 each, 14/3; 6 each, 27/6.		— JAS. KELWAY, vivid vermilion	6 0		
<b>PHINIUMS</b> , in large clumpy roots, many of these	5 0	— LANGPORT SCARLET, brilliant scarlet	6 0		
re named kinds, mixed, 50, 17/6;		— MRS. BATEMAN BROWN, largest crimson	7 6		
<b>INERON B. LADHAMS</b> , heads of blue	5 0	— MRS. CAIRNS, velvety crimson	6 0		
<b>ERSTHAM GLORY</b> , blue, semi-double	4 6	— PRINCESS MARIE, fine pure white	6 0		
<b>UAKERESS</b> , delightful lavender	5 0	— PINK PEARL, light pink, white ring	6 0		
		1 each, 6/-; 3 each, 16/6.			

TERMS.—All prepaid orders of 10/- and upwards carriage paid. If less value, kindly enclose 1/- towards carriage and packing. All orders despatched in rotation, and subject to being unsold on receipt of order.

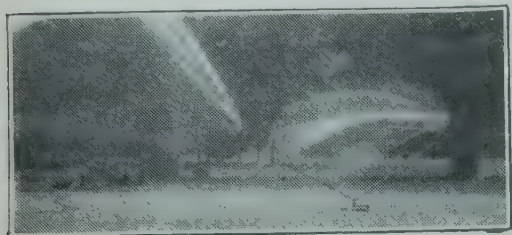
**HARKNESS & SONS, F.R.H.S., The Grange Nurseries,**  
BEDALE, YORKSHIRE.



# THE 'PATTISSON' HORSE (LAWN) BOOTS

## THE NEW (PATENT) MAJESTIC REVOLVING SPRINKLER

The simplest and most efficient Sprinkler for large areas.



Made in three sizes:

No. 1 waters 500 square yards,

No. 2 waters 1,200 square yards,

No. 3 waters 2,000 square yards,

without being moved.

Illustrated Price List, with Testimonials, from the makers—

"The ONLY Economical Ones."  
USED in the Royal and Thousands of the Principal Gardens, GOLF and CRICKET GROUNDS, and exclusively at the Oval (S.C.C.C.) for the past 20 years.  
OVER 10,000 SETS IN USE IN THE U.K.



Fig. 1 for Shod Horses.

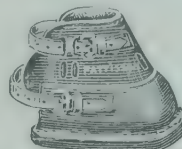


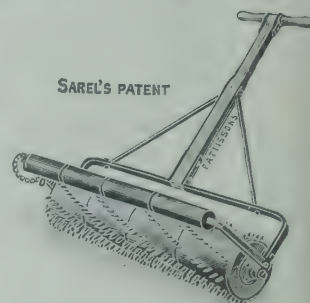
Fig. 2. Wetted Boot.

HUNDREDS OF TESTIMONIALS.

*The Field* says: "As good as anything that could be devised."  
Mr. Wm. Hardy (Gardener to Lt.-Col. Hon. W. Guinness): "The boots supplied 17 years ago are still in use and have always been satisfactory."

## SAREL'S PATENT SPIKED ROLLER.

COMM. HILLYARD, R.N., The All England Lawn Tennis Club, Wimbledon, writes: "The 'Sarel' Roller is invaluable for aerating the ground. It saves an enormous amount of labour and is most beneficial to the turf. I should be very sorry to be without such a valuable implement."



H. PATTISSON & CO., STREATHAM, LONDON, S.W.16.

## DOBBIE'S PLANTS HARDY SCOTCH GROWN

Growers requiring Chrysanthemums, Dahlias, Pansies, Violas, Hardy Herbaceous and Alpine Plants, should consult our Plant Catalogue, . . . Post Free on application. . .

MENTION THIS PAPER.

**DOBBIE & CO., LTD.,**  
KING'S SEEDSMEN, **EDINBURGH.**

Please mention THE GARDEN when writing.

## FOR SPRING PLANTING

THE EXECUTORS OF THE LATE

## ANTHONY WATERER

BEG TO OFFER

### STANDARD TREES in Great Variety

Consisting of:

**LIMES, PLANES, ELMS, etc.**

### EVERGREEN and DECIDUOUS SHRUBS, viz.:

BOX, green and variegated, 3 to 8 ft.

HOLLIES, Common, 5 to 8 ft.

" Variegated and Green varieties, 2 to 6 ft.

THUIOPSIS BOREALIS, 10 to 12 ft.

CUPRESSUS LAWSONIANA, 12 to 14 ft.

SPRUCE FIRS, 6 to 8 ft.

CEDRUS ATLANTICA GLAUCA, very fine, 10 to 14 ft.

OSMANTHUS, PHILLYROEAS, SPIROEAS, LILACS, VIBURNUMS, etc.

### GOLDEN YEWS

A magnificent Stock in all shapes and sizes from 2 to 10 ft.

AZALEAS in great variety, 2 ft. to 8 ft.

RHODODENDRONS, without doubt the finest stock in the trade of named varieties, 2 to 6 and 8 ft.

RHODODENDRONS, Standards, in best named varieties.

HARDY HEATHS in great variety, and a good stock of General Nursery Stock.

CATALOGUES UPON APPLICATION.

Enquiries and Inspection invited.

**KNAP HILL NURSERY**  
Woking Station :: SURREY

Please mention THE GARDEN when writing.

# 'GOVERNOR'

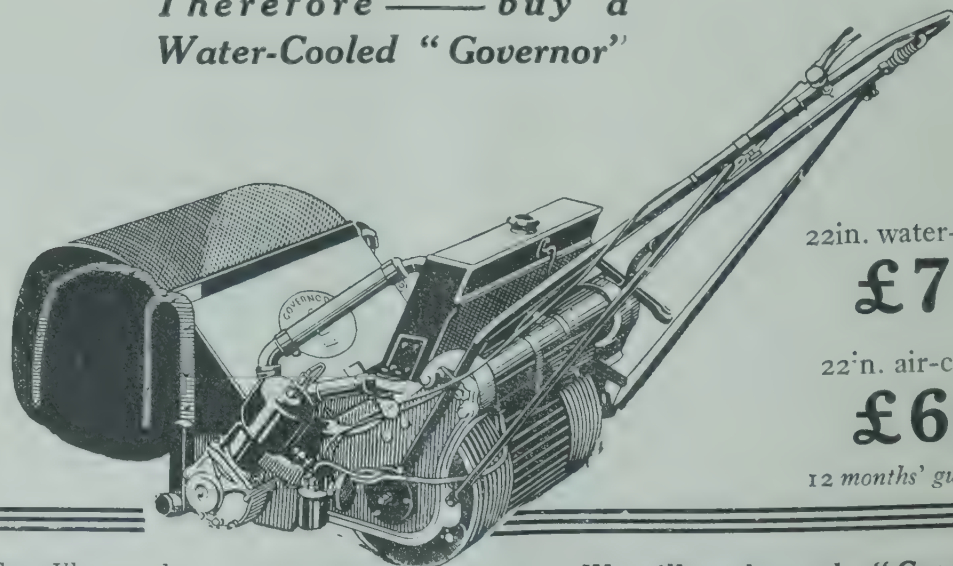
## MOTOR LAWN MOWER (WATER-COOLED)

The "Governor" Patent Motor Mower, with its *water-cooled* engine, gives unlimited cutting without developing undue carbonisation. For this important reason alone, experienced users loudly praise the "Governor" as the most effective Motor Mower that engineering science has yet evolved.

The "Governor" is a one-man job, and at a cost of roughly 2d. for fuel will cut 1,000 square yards in less than 20 mins. as against a man and boy working approximately 1½ hours. No mechanical knowledge is required to operate the "Governor"; a boy after 10 mins. instruction can manipulate it perfectly.

It is the cheapest and most efficient water-cooled Motor Mower in the world. By its economy in labour alone it pays for itself the first season.

Therefore — buy a  
Water-Cooled "Governor"



22in. water-cooled

**£75**

22in. air-cooled

**£65**

12 months' guarantee

Write for Free Illustrated  
Booklet NOW.

We will send you the "Governor"  
for a seven days' Free Trial.

JOHN SHAW & SONS, WOLVERHAMPTON, LTD. (Dept. 12), Wolverhampton  
Est. 1795.



# FENCES IN THE GARDEN

**A**LTHOUGH fences are mostly used to divide one person's property from someone else's, they nevertheless find extensive application for dividing different portions of the same man's garden from each other, and also for keeping out livestock and trespassers from the garden itself when they are used to divide it from meadows, etc., or when a public footpath or roadway runs along one or more sides.

What type of fence shall we use, and shall we employ a fence at all, or build a boundary wall? In these days wall building is a very expensive matter indeed, and in most cases quite out of the question. Fences, therefore, of one sort or another must be employed.

**WATTLE HURDLES.**—These are among the most useful of economical fencings. They are cheap, light, easily erected and easily moved, and additions or renewals are quickly made. If strengthened with strong stakes they make an admirable background for climbing plants. Although not so lasting as an oak paling, they stand the weather long enough for all ordinary purposes. They are invaluable for temporary shelters for rare and delicate shrubs, and an enclosure of a few square feet is put up or removed in a very few minutes. The shelter they afford from cold winds is undoubtedly considerable, and a few of these erected across the exposed side of a plot planted with early potatoes will make all the difference, as will be quickly found, between the crop getting nipped and growing away unchecked. Likewise, for seedlings, etc., for which a cold frame cannot be spared during the springtime, wattle hurdles will be found useful, as the wind will strike them and pass over the seedlings themselves instead of striking the soil in which they are growing.

When not required for use for a few months wattle hurdles are easily packed out of the way under any old roof that is available. They must, however, be kept as dry as possible when in this store, otherwise they will quickly perish and become more or less useless.

**IRON FENCES.**—For more elaborate fences or where absolute privacy is required, iron fences are much in demand. Owing to the cost of building walls of brick or stone, iron spiked palings are a good alternative, while on many estates iron paling posts are preferred to wooden owing to their lasting qualities. The same applies to gates made of iron or other metals, while, of course, wrought iron gates, often copies of old designs, enhance the beauty of the entrance to a garden.

**WOODEN FENCING.**—When a close fence is required, whether to maintain privacy, or for any other purpose, close boarded oak fencing is to be recommended. This is strong and very durable, provided, as goes without saying, that the wood is well protected with some chemical compound, such as creosote or thoroughly painted before it is erected. This is supplied by fence-making firms in heights ranging from 3ft. to 6ft., and the price per lineal yard is remarkably

cheap, considering the high cost of everything nowadays.

When a pale fence only is to be used, cleft chestnut is recommended, but other good woods include larch, fir and pine. The two principal types of this consist of fencing with the pales of even height, and fencing with the pales of two or more different heights. Obviously, if the whole fence is of an even height it is stronger and less easy to break down, and this is, therefore, recommended in preference to having say a 4ft. fence of which every other pale is only a yard in height.

Paling fences generally have the individual pales wired to each other in two, three, or more places, the ends of the wires, of course, being wound round or stapled to stronger posts at intervals.

wooden or concrete posts have to be inserted at intervals, and care should be taken when erecting to keep the wire as taut as possible. Straining pillars have, obviously, to be inserted at each corner, but for long, straight fences one of these in every hundred or hundred and fifty yards will be quite sufficient. Attachment or intermediary posts must be allowed for at the rate of about eight per hundred feet, or closer in certain special instances.

It may be mentioned before leaving the subject of wire fences that more effort might well be made to beautify them during the summer months by planting climbing annuals along their inner sides, provided, of course, that these are not of a poisonous character, or likely to injure stock which may eat



A CLOSE CLIPPED HEDGE OF *LONICERA NITIDA*, FORMED OF PLANTS THREE YEARS OLD.

Where an extra strong paling fence is required it may be worth while to carry a wooden bar along the top of the row of palings, nailing through this into each, and also a second or third bar at a suitable position part of the way down.

**WIRE FENCES.**—These are not, as a rule, very beautiful, but they are certainly durable. A large range of meshes and gauges is available, the two most favourite forms being the diamond mesh and the square mesh. A leading manufacturer informs me that there are now on the market about a hundred distinct combinations of gauge and mesh. Thus a wire fence can be adapted to almost every requirement.

The height of wire fences must obviously depend, as in every other case, on the purpose for which they are to be employed. From 3½ft. to 4ft. is a favourite one, but for really substantial protection a fence 6ft. in height, with the top well barbed, is desirable. Strong

them from the other side of the fence.

**LIVE FENCES.**—Just a word in conclusion about live fences of privet or other shrubby subjects. These are sometimes used in connection with barbed fences or pale fences, but are not very often used when wire is employed. Personally, I should never advise planting privet on account of everybody having a privet hedge in their garden. Golden privet, however, is well worth considering because of its greater attractiveness; while holly makes a very thick and quite impervious hedge. A new and choice evergreen which is now coming to the fore as a suitable plant in forming live fences is *Lonicera nitida*. Poisonous shrubs, such as the yew, should not be used on account of the danger of cattle eating them, or the clippings becoming mixed with food for livestock accidentally. If live fences are to be planted this season the work must be done immediately, as it is getting late.

E. T. ELLIS.



# SEED SOWING

BY EDWIN BECKETT.

A WELL behaved seed packet generally bears some such instruction as "Sow on a warm site in April," or "Sow in drills in May," and it all appears very simple; but these notes must start with a query as to whether it is quite so simple as it seems at first glance. Those to whom seed sowing is a comparatively rare occupation may well hesitate before replying, but those accustomed to the work will no doubt answer most emphatically in the negative. That may well be understood, for more seed is probably wasted through poor or bad sowing methods than from any other reason. Incidentally, this survey of the art may save many an innocent seedsman from blame because "seeds won't germinate."

In order to introduce the subject, we will consider what a seed is, and how it functions towards the production of plant life. It is just a small body containing what is really a microscopic plant, termed the embryo, and a quantity of food material, though at times this constituent is missing, the whole being encased in a coat of greater or lesser strength. From this the living embryo under certain conditions escapes to produce the mature plant in time. When germination commences, the primary parts which will ultimately give rise to root and stem are thrust forth from the seed vessel—the root portion going downwards, avoiding the light, though air is necessary to it, while the other part thrusts upwards towards light and air, and eventually becomes the stem of the plant. Moisture, temperature and air are the governing factors that control germination, and these facts now bring us to the prime essentials for a commencement of seed sowing.

The first point to remember is, never to bury the seed too deeply in the soil so that the tiny plant is stifled and destroyed before the stem portion can reach the air and light, so necessary to sustain life. Often the food supply within the seed is exhausted in the attempt of the stem to reach above ground level. This deep sowing is a frequent error, and one that can be avoided by bearing in mind an everyday rule: only to cover a seed by its own depth of soil. This is a "rule of thumb" method, not a hard and fast one, for some seeds are so fine that they only need sprinkling on the surface of the soil of a seed pan and to be pressed into contact with the soil, but, generally speaking, it is a safe and good rule.

The second matter to observe is never to sow in hopelessly wet soil, in which case one would only expect the seed to rot before it would germinate, and to avoid sowing, whenever possible, at such time as the temperature is so low that it would only retard or even prevent proper germination.

Another detail that should be properly observed is to have the soil in good tilth, *i.e.*, sufficiently broken up to

receive the seed in such manner that air is present to aid the germination. The Biblical parable of the sower and the seed is probably one of the finest lessons on this point and others that any gardener could wish for in illustrating the matter.

One very important consideration always to bear in mind is to avoid sowing too thickly. It is of more importance than may at first be imagined, and to emphasise the lesson and drive it home we must parallel the raising of seed with human life. The crowding together of human beings in confined areas is a prime cause of stunted growth, ill-health and disease, mainly through the lack of sufficient light and air, and also partly by the absence of proper food and protection. Such is the case with young plants grown in overcrowded conditions. The dreaded damping-off disease (*Pythium de Baryanum*) of plants, for instance, is a frequent result of thick sowing and too damp a seed-bed, and there are other diseases which affect plants that are encouraged by such adverse conditions.

SEED PAN OR POT SOWING.—Pans or pots should be perfectly clean, both within and without, and drainage is the most important item after that. A stopper of broken crock should be placed in the bottom, surmounted with lesser pieces, and finally finished with smaller crock, over which should be placed a good-sized piece of fibrous turf. The general idea of the "crocking," as it is termed, is that for seed raising two-thirds of the space should be occupied by crock. This is all very well if the young seedlings are to be transplanted as soon as they are ready to handle, but if there is a likelihood of such an operation being delayed for a time, lesser crock should be employed to permit more compost, in order to sustain the life of the young plants until they are moved and to lessen the call for water, such as would be the case if only a shallow depth of soil is in the pot. On this point, of course, the sower must use his discretion. Finally, on the turf layer place the compost so as to fill up to within a half-inch from the rim when sufficiently firmed down, which operation should be done with the finger-tips. The idea of the latter is to obviate layers of soil, packed down firm, on which another layer is spread and packed, as this leaves a crevice-like division into which the seedlings have a tendency to pack their young roots rather than to spread them out evenly downwards in the soil. When seeds are sown, such as peas and beans, in pots where they are to grow on, the foregoing rules require modification as to the depth from the rim, for in such cases sufficient space must be left for top-dressing the young plants as growth is made, so that they do not get starved. Other details, such as soil covering, watering, etc., are controlled by the

early remarks, and it only remains to add that the compost used should be of a nature and sufficient fineness to suit the seed sown and moist enough for the purpose. When the seed is sown, should it require watering, careful immersion in water is far preferable to watering with a can and rose, as the latter method, especially with regard to very small seeds, is likely to disturb them badly. Remember to sow evenly and not too thickly. Sand should always be a constituent of the compost, for this is the medium in pot raising that allows the necessary air to penetrate to the roots of the young plants as well as rendering the compost porous.

SOWING IN DRILLS.—This method is adopted in frames and for the open ground in cases where it is desirable to grow the plants under proper control and where transplanting is not desirable for the crop as it stands. It is the principal method for open-air work and, incidentally, effects good saving of seed in the majority of cases. The drills should be drawn in lines running north and south for preference, so that plants are permitted to have the influence of sun on three sides, whereas were they drawn east to west only one side would be principally affected. The drills should be drawn in a surface of fine tilth, and only of sufficient depth to allow the seed to be sown in conformity with the previous advice of not burying too deeply. Seed should be sown thinly.

BROADCAST SOWING.—In these days of wireless, very few people but know the meaning of broadcasting, and when applied to seed it still only means spreading in all directions. This method is principally used for seed-beds, where such items as the brassicas, leeks, celery, etc., suitable for transplanting when required into rows in other quarters, are sown. The only notes on this that are required are again to advocate the surface of the soil being of fine texture and to renew the advice against sowing too thickly. Further should be added a caution to protect against attacks by marauders, such as birds, mice and other seed raiders, by means of nets and other devices when the sowing is completed. This is necessary in all cases, and it is also necessary to protect the young seedling plants against slugs, which may effectively be done by ringing round them with sharp cinder ash.

Little more need be added to this subject other than a caution to thin out seedlings at an early stage so that they do not get overcrowded, with the resulting "drawing" effect, and to mention that when the transplanting period arrives and the plants are being moved from their nursery quarters this should be done in a careful manner so that as much soil as possible is left in position round the roots in order to prevent root disturbance as far as this is possible. Transplanting is an art that only careful practice will teach.





## MCDUGALL'S PERFECT SAFETY WEEDKILLER

Keeps paths and drives free from unsightly growth.

Being entirely free from poison its use does not involve the slightest danger to children or domestic animals, or any fear of poisoning poultry, game, etc.

Pint tins ... 1/6 2 gall. drums 6/6  
Quart " ... 2/6 5 " " 25/-  
1/2 gall " ... 4/- 40 " casks £7/10/-

1 pint Weedkiller to 3 gallons water.

Sold by  
Nurserymen, Seedsmen,  
Ironmongers, etc.

If you have any difficulty in obtaining  
apply direct to:-

**McDougall & Robertson, Ltd.**  
BERKHAMSTED, Herts.  
(formerly of Manchester.)



# Barter's

TESTED SEEDS

Carters Leather-Jacket Killer

## "KIL-JAC"

A non-poisonous, safe, sure and easy cure

For further particulars apply to

### James Barter & Co.

Grass Seed and Turf Specialists,  
RAYNES PARK, LONDON, S.W.20

## KILOGRUB



Exterminates all Garden Pests in the soil.  
Your Seedsman has it.  
Tins:-9d., 1/6, and 2/6.

Bags:-1-cwt. 6/6; 1/2-cwt. 9/6; 1-cwt. 15/-.  
Write for particulars to the manufacturers:-  
**JOHN PEAK & Co., Ltd., Wigan, Lancs.**

## GARDEN LOVERS

Write for Catalogues of  
**PROTHEROE & MORRIS'**

• **HORTICULTURAL SALES** •

MONDAY · WEDNESDAY & FRIDAY  
67, 68 Cheapside, London E.C.2. Phone: City 3856

# GREAT SPRING OFFER

## Stock Your Garden NOW at Half Price

Packet of Exhibition Sweet Peas free with 10/- orders

ORDER EARLY AND SECURE A BARGAIN

### 5,000 APPLES, PEARS, PLUMS, CHERRIES

Must be cleared. 3- and 4-year trees, bush or cordon, at 1/-, 2/- and 3/- each. Apples: Cox's, Bramley's, Ellison's Orange, King Pippin. Plums: Victoria, Belle de Louvain, etc. Pears: Fertility, Williams, Beurre, Hardy. Cherries: Morello, White Heart. Red and Black Currants: 2- and 3-year, 3/- and 4/6 doz. Raspberries: 1/- doz., 7/- 100. Hailshamberries: 4/- doz. Loganberries: 9d. and 1/- each. Strawberries, 4/6 100. 1 Sage, 6 Mint, 6 Thyme (Golden and Common), 1 Rue, 1/6, carriage paid.

### 8/6 doz., ENGLISH BUSH ROSES.

All best names. Los Angeles, Mrs. H. Morse, Daily Mail, Gen. McArthur, Mrs. H. Stevens, etc. Ramblers, 1/- each. All colours. Standard Roses, all our own grown, 3/- each. Marechal Niel, W. A. Richardson, 7/6 each.

### ORDER EARLY AND GET FIRST CHOICE.

Clematis, all colours, 2/- each, large plants, all named; Wistaria, 2/6; Broom, 1/6 and 2/-; Golden Elder, 1/-; Sweet Briar, 9d.; Veronica, 6d.; Acer Negundo, 6d.; Euonymus (golden and green), 6d. and 1/-; Lilac, 1/6 and 2/-; Laurustinus, 6d.; Ribes (scarlet), 1/-; Honeysuckle, 1/6 and 2/-; Std. Crab, Std. Thorns (scarlet, white, and pink), 7/6 each. Evergreen Privet, 10/- 100.

### PERENNIALS TO PLANT NOW.

12 Delphiniums (fine named varieties), large clumps	5/6
12 Phlox	5/6
12 Iris, fine shades (choice varieties)	3/-
12 Potentillas, orange and scarlet	4/6
12 Alstroemeria (Golden Peruvian Lily)	3/6
12 Rock Plants in 6 varieties (named)	2/6
12 Scented Double Peonies	5/6
12 Polyanthus (2-year clumps)	2/-
12 Carnations, lovely shades	2/-
12 Pinks (Mrs. Sinkins and Her Majesty)	2/-

### ALL 6d. PER LOT.

6 Pansies, 2 Red Hot Poker, 6 Arabis, 12 Cheiranthus, 2 Poppies, 2 Lupins, 10 Montbretia, 2 Aubretia, 6 Forget-me-not, 4 Helianthus, 2 Dielytra (Bleeding Heart), 3 Hollyhocks, Sweet Williams, 2 Anchusa, 3 Gypsophila, 3 Heuchera Sang., 6 Lily of Valley, 4 Chrysanthemum max., 2 Anemone japonica.

### 500 GIANT SWEET PEAS FREE.

with a large packet of Clarke's Mammoth Onions (contains 2,000 seeds), 1/3, post paid.

100 Glorious Gladioli (5 named colours), Flame, Scarlet, Pink, White, Yellow, Mauve, Blue, etc., 7/6 post free.

Enormous blooms (one of our customers secured 2 first prizes last year) Gold Medal Begonias, double and single, Orange, Pink, Red, White, Lemon, 2/6 doz.

All orders over 20/- carr. paid. Smaller orders please add extra  
Get our Illustrated List. Post free, containing our wonderful offer.

## CLARKE'S ROYAL HAMPTON NURSERIES (Dept. G), HAMPTON, MIDX.



**MATTHEWS'**  
HIGH GRADE  
HORTICULTURAL  
FERTILISER  
COMPARE ANALYSIS

# MATTHEWS'

## BIG PRODUCTION FERTILISERS

**MATTHEWS'**  
HIGH GRADE  
TOMATO  
FERTILISER  
COMPARE ANALYSIS

**PROFITABLE GROWING**

IN **1925**

EXHIBITION & PROFIT

**MATTHEWS' "Maximum Crop" GARDEN SEEDS**

**SCOTCH SEED POTATOES**

Choice Flower Seeds  
Finest Spring Bulbs

Write for Catalogue  
**IT WILL PAY YOU**

THOUSANDS OF TONS SOLD ANNUALLY

	Amm	Phos.	Potash	lbs.	cwts.
<b>MATTHEWS' HORTICULTURAL</b> For POTATOES & GENERAL GARDEN use.	7%	21%	4%	14	28
<b>TOMATO</b> All are "MAXIMUM CROP" COMPLETE MANURES essential FOR ECONOMICAL SUCCESS.	9%	21%	6%	3/3	5/9
<b>LAWN</b> NOTE—double value compared with some that are sold.	4%	25%	2%	3/—	5/6
Bone Charcoal ... ..	1.5%	67%	—	2/9	5/—
Bone Meal, English, Best ... ..	4.5%	45%	—	2/9	5/—
Basic Slag ... ..	—	30%	—	1/6	2/9
Bone Flour, Steamed ... ..	1%	60%	—	2/3	4/—
Fish Manure ... ..	10%	14%	—	3/6	6/6
Garden Salt ... ..	—	—	—	1/6	2/9
Hoof and Horn ... ..	16%	—	—	3/6	6/6
Kainit ... ..	—	—	14%	1/6	2/6
Lime, Ground Carbonate, Superfine ... ..	—	—	—	3/—	5/6
Meat and Bone Meal ... ..	8.5%	18%	—	3/6	6/6
Meat Meal ... ..	8%	30%	—	3/6	6/6
Nitrate of Soda ... ..	18%	—	—	4/—	7/7
Peruvian Guano ... ..	14.5%	22%	2.5%	3/—	5/9
Sulphate of Ammonia. 21% Nitrogen ... ..	25.75%	—	—	3/2	6/—
Sulphate of Potash ... ..	—	—	50%	1/8	3/—
Superphosphate ... ..	—	35%	—	5/3	9/6

**MORE PROFIT THROUGH EXTRA YIELD AND IMPROVED QUALITY.**

**MATTHEWS' LAWN SAND**

Effectively kills all the common weeds in lawns, and at the same time acts as an excellent Fertiliser. Sprinkle evenly over the weedy patches, at the rate of 3-ozs. per square yard, in dry weather. Repeat at intervals of a few weeks, till the weeds are killed. The grass will become brown and appear to be burnt, but it will recover, and the useful grasses will grow more vigorously.

4/- 14lbs. 6 6 28 lbs.  
10 9 56 lbs.  
20/- cwt.

CARRIAGE PAID on orders to the value of 5/- upwards to the nearest station in the United Kingdom

ESSEX RESIDENTS 1/6 per cwt. less.

**JAMES & GEO. H. MATTHEWS,** Head **HAROLD WOOD, ESSEX**

And at COLCHESTER, ONGAR, BRENTWOOD, CHADWELL HEATH, WICKHAM BISHOPS and BRIGHTLINGSEA

Phone: ROMFORD 284

IF the reproduction on the cover, of Anemone fulgens, appeals to you, write:—

**MALBY'S**

THE HORTICULTURAL PHOTOGRAPHERS, whose immense collection of Horticultural subjects is at your disposal.

23, Chelmsford Rd., WOODFORD, E.18

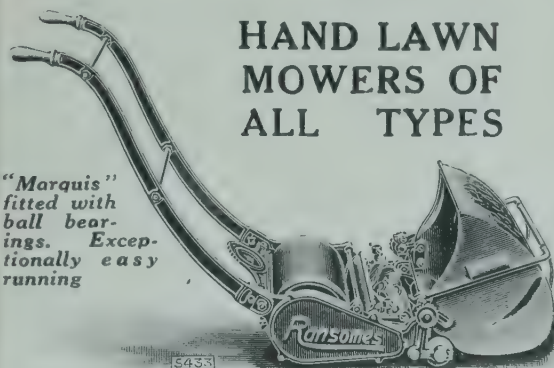
Please mention THE GARDEN when writing.



By Appointment.

# RANSOMES' LAWN MOWERS

"The Best in the World."



**HAND LAWN MOWERS OF ALL TYPES**

"Marquis" fitted with ball bearings. Exceptionally easy running

ALSO  
**MOTOR, HORSE, PONY AND DONKEY MOWERS.**

PROMPT DELIVERY.

Write for List No. 111 to  
**RANSOMES, SIMS & JEFFERIES LTD.**

ORWELL WORKS, IPSWICH.

Sold by all Ironmongers and Seedsman.

Please mention THE GARDEN when writing.

## "Take the backache out of digging!"



With "Neverbend" Spades, every soil becomes easy to work because of the keen cutting edge, lightness, strength and thinness of the blade. Incomparable for cutting through roots, etc.

**To use a "Neverbend" is to turn work into a pleasure.**

Do not be put off with a cheap substitute. Insist upon a "Neverbend." The popular priced spade with the definite quality guarantee.

**"NEVERBEND" SPADES, FORKS & SHOVELS**

are made by

**SPEAR & JACKSON, Ltd., SHEFFIELD**

In case of difficulty—write direct.

**YOU CAN ALWAYS HAVE BEAUTIFUL FRAGRANT BLOOMS BY USING**

# Carmona

## Fertilizer

**FOR FEEDING YOUR PLANTS**

1-lb. 9d. Post Free 1/3	In Tins 2-lb. 1/3 Post Free 1/9	7-lb. 3/- Post Free 4/-	Bags 112-lb. 26/- Carriage Paid.
-------------------------------	--	-------------------------------	---



A Carmona measuring Spoon in every tin.

If your Seedsman does not stock Carmona send your order direct to the Manufacturers—

**ROBINSON BROTHERS Ltd., West Bromwich, Staffs.**



# CORRESPONDENCE

## PINUS BUNGEANA.

THE accompanying illustration of *Pinus Bungeana*, the lace-bark pine of North China, was reproduced from a photograph given to me by a lady who has just returned from Peking. It represents a tree growing in the environs of that city, and gives, I think, an excellent idea of the most prominent characteristic of this pine, which is, of course, the conspicuous whiteness of its trunk. This character, unfortunately, does not develop until the tree has attained a considerable age—at least fifty years, I believe—and no tree in cultivation in this country has shown it yet. The species, nevertheless, is thriving well, and at Kew there is a group of healthy trees in the pinetum at the south end of the lake. Apart from the white trunk, which we shall have to wait for, *Pinus Bungeana* is well worth growing. The best grown young trees assume a pyramidal form; others make large, rounded bushes. I remember the late Philippe de Vilmorin told me he considered there were two natural types of this tree distinguished by this difference in habit. Both are well furnished with vivid green foliage and are ornamental enough to be planted by all who take an interest in conifers. This pine is quite at home on a limestone formation. Its leaves, in bundles of three, are about 3 ins.



PINUS BUNGEANA WITH ITS CHARACTERISTIC WHITE BARK.  
(From a photograph taken in China.)

long, the basal sheath soon falling away. The only other pine closely related to it is the very rare *P. Gerardiana* from the Himalayas. The cones, each 2 ins. to 2½ ins. long, with scales armed with a decurved spine, have for several years past been borne by trees at Kew.—W. J. B.

## BULBS IN THE UNITED STATES.

SIR,—With reference to the recent embargo on potatoes from the United States, if Great Britain and other countries would issue a few embargoes against agricultural products, we, in the United States, who are interested in the importation of bulbs are inclined to believe that some of the arbitrary features of Quarantine 37 would be either lifted or would be tempered with common sense.

Our Department of Agriculture has given the growers of narcissi in the United States three years in which to accomplish and master an undertaking which has taken European bulb centres over 300 years to become proficient in, and this period of three years ends with December 31st, 1925. This act alone is inconsistent, because anybody, even our Department of Agriculture itself, can point out in conclusive evidence that narcissi cannot successfully be grown in the United States on a commercial scale.

It has been suggested among the importers of bulbs in the United States that they would be willing to pay an extra 2 dollars per thousand on imported bulbs for inspection and treatment fees; this in addition to the 2 dollars duty that has to be paid in any case. This inspection and treatment would be in addition to that required in the packing of shipments in Europe. At the present rate of importation, duty and inspection fees would yield 400,000 dollars per annum. If every importer of narcissi had to consign his shipment to New York for treatment and inspection, I am satisfied in my own mind that all narcissi imported into the United States could be inspected and treated for 25,000 dollars per annum.

Horticulture in this country is of no importance when compared with agriculture, which makes it exceedingly difficult for the horticulturist to get a hearing, while, on the other hand, the protest of the American farmer is immediately carried into the Senate and Congress. The five members constituting the Federal Horticultural Board are vested with power—through the Secretary of Agriculture—to employ such means as will safeguard agricultural and horticultural interests in the United

States, to promulgate and put into effect from time to time such embargoes and quarantines as they, in their judgment, see fit, often with practically no thought for the interests of commercial growers at large.

We fumigate our cotton before it leaves the country in order to guard against the spread of the boll weevil, and this fumigation



PRIMULA CHIONANTHA.

is absolutely satisfactory. Because this is possible, we who are interested in narcissi see no reason why the bulbs should not be imported subject to rigid examination and treatment before being released.—DAFFODIL.

## A VALUABLE FLOWERING PRIMULA.

SIR,—Everyone who can grow *Primula chionantha* successfully will agree that it well deserves the award of garden merit conferred on it by the Royal Horticultural Society. In the R.H.S. Journal note mentioning this award the time of flowering is given as June and July. I cannot understand this, as my plant last year flowered in May, and things with me are a fortnight to a month later than in the south. Also I noticed it flowering in the Edinburgh Botanic Garden about the middle of May. My plant behaved rather curiously last year, for after flowering well in May—as the enclosed photograph shows—it lost all its leaves and went to rest in August, but started growing again in October, and had two fine flower spikes in November. After this it again died down, and now on February 5th it is starting into growth again. It was not alone in flowering in this way for a second time last autumn, as *Primula muscarioides* and *P. Littoniana* did the same.—R. B. COOKE.

## ROSE TRIER.

SIR,—I am much interested in two letters in THE GARDEN referring to Rose Trier. I have "inherited" a climbing rose which is labelled "Trier." It is a strong grower with brownish stems, flowers freely, bunches of small pinkish white blossoms, no scent, and it ripens brownish green hips. I should be grateful if either of your correspondents will tell me if it is true to name, or has Trier died and only the stock remained?—M. M. S., Bath.



# SIMPLE GARDENING

## MIGNONETTE.

**T**HIS tiny-flowered plant does not require any recommendation; it is one of the most widely known of all garden annuals, but, even so, it is not generally well cultivated. Usually, a few seeds are sown thickly in rows or patches in the borders. The resultant seedlings are rarely thinned out, but all, or nearly all, bear small stems with a few tiny flowers in a bunch at the top. The plants, in wet weather, are beaten down and many rot on the ground. There is, of course, the medium treatment with corresponding improvement of flower and plant. The mignonette grows well, and forms a strong plant, in a pot as well as in the open border. With a little extra care fine standards may be grown. There are some beautiful varieties, seeds of which are advertised by seedsmen in *THE GARDEN*. Having made a selection of these the cultivator should duly prepare a plot of ground in which to grow the plants in rows for cutting and in clumps in the border. A medium rich soil is the best; in poor ground the plants are thin and wiry; in very rich, they are too strong and sappy of stem. Some old mortar rubble will improve the rather rich soil. Sow the seeds thinly, watch the seedlings carefully and duly thin them to at least 3 ins. apart. Before the plants entirely cover the ground scatter some leaf-soil and loam, mixed, between them. Fine masses of plants will result, bearing big spikes. If grown in pots for the windows or greenhouse, sow several seeds in small pots in frames, thin the seedlings to two in each pot and re-pot in due time. Do not transplant; 6 in. and 7½ in. pots are suitable for final potting.

## CELERY SEEDLINGS.

Celery is one of the most difficult of our many kinds of vegetables to grow. Undoubtedly, the young plants can be grown grossly if they are subjected to a strong bottom heat, but this treatment would be wrong. I remember seeing a box of fine-looking plants on a hot-bed many years ago, when I was a youth. A gentleman who saw them remarked on their splendid condition. But at the end of the season they were failures, possessing big but hollow stalks. A noted judge once referred to some large sticks staged, as overgrown. Celery plants should never receive a check, but be grown on steadily and in firm, rich soil when the trench stage is reached. It should be remembered that celery plants are gathered as bared in the ridge of soil, a start being made at one end of it. All the plants should be of the same size as nearly as possible, and to ensure this being so seedlings of similar size should be transplanted in the first case. The work of transplanting should be done timely at each stage, first at 2 ins. apart in boxes 4 ins. deep containing about 3 ins. of loam, leaf-soil and a very small proportion of well rotted manure. A greenhouse shelf is an ideal place at first, then a cold frame. In the meantime, a

bed should be made in another cold frame or a sheltered position outside. Put down a layer of sifted ashes 1 in. deep, firm these with the back of a spade, then add a thin layer of rotted manure and follow with one of good compost 4 ins. deep. Plant the celery 6 ins. apart. In due course they can be lifted and planted in the trenches with all the soil adhering to the roots, and no check will occur.

## PREPARING PLANTS FOR WINDOWS AND HANGING BASKETS.

Very frequently, plants are taken direct to a dwelling-room window without any previous preparation. The result is that, in such cases, the plants are unsatisfactory throughout the whole of the summer. There are, in the majority of dwelling-houses, windows facing north, east and west. Of course, some kinds of plants do better in cool than in hot windows, and so it is a wise plan to study this matter and provide the kinds of plants most suitable to the various aspects. For example: ferns do best in east, north and north-west windows. Zonal pelargoniums, petunias, nasturtiums and marguerites do well in a hot window. For hanging baskets, naturally drooping plants such as ivy-leaved pelargoniums and fuchsias are suitable, and tiny plants such as lobelia are for all window boxes and baskets. Persons who own greenhouses should re-pot selected specimens that are to be grown in pots throughout the summer, and get them nicely established in the pots before they are placed in the windows. Other plants that are to furnish baskets or window-boxes should not be allowed to become pot-bound before they are placed in their summer positions.

Purchased plants should all be up to the standard required for the various purposes.

## EVERLASTING FLOWERS.

These are very beautiful and interesting flowers and are grown more carefully now than they were a generation ago. In favourable seasons most of the varieties may be raised from seeds sown in the open borders in the southern counties. But it is well worth while raising seedlings in boxes and transplanting them, in due time, to their flowering quarters. If seeds are sown thickly outside and the resultant seedlings are not freely thinned-out the flowers are very poor ones. A few plants well treated will surprise the cultivator by their beauty. Use the following ingredients for a compost: Loam, 2 parts; rotted manure, 1 part; and leaf-soil, 1 part; sand is not required. The soil in which the plants are flowered should be deeply dug and also well manured. The planting should be done the third week in May. The flowers should be gathered, made into small bunches and suspended, heads downwards, in a cool, dry shed, when they are three-parts open. So suspended the stems retain their position. The best way to use the flowers in the winter is to form bouquets by inserting the stems in soft lumps of clay, the latter dry and the bouquets may then be placed in vases in the dwelling-rooms and halls. The helichrysums are all richly coloured; the rhodanthe, purple and white respectively, is really exquisite; *Statice Suworowi*, annual, and *S. latifolia*, perennial, are also charming. These are the best to grow. **GEORGE GARNER.**



Types made include Pneumatic, Hand, Knapsack, Bucket and Wheeled Wet and Dry Sprayers. Prices from

25/-

Horse and Hand Hoe Cultivators

70/- & 35/-

**VERMOREL "ECLAIR" Spraying Machines**  
Gained the Highest Awards given in their respective classes at the Royal Horticultural Society's Trials, 1924.

Write for Full Particulars and Catalogues.



**COOPER, PEGLER & CO., Ltd.**

24a/26c, Christopher Street, Finsbury Square, LONDON, E.C.2.

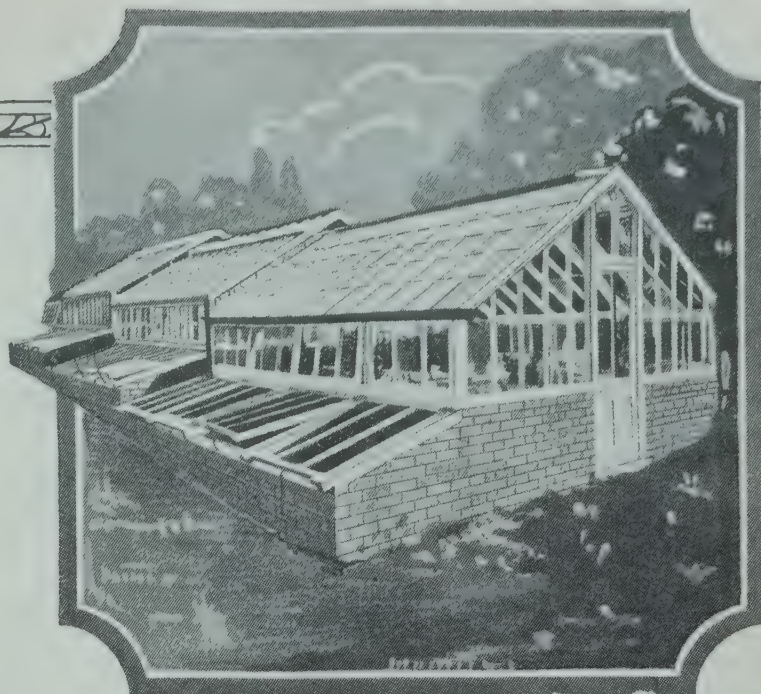


## Glass House Building

THE building and designing of Glass Houses is a highly specialised work—that is, if the structure is to be correctly designed and built to last.

In dealing with the firm of Duncan Tucker & Sons, Ltd., you are obtaining the combined experience of many years devoted exclusively to the erection of every form of Glass House ranging from the modest "Lean-to" to the expansive Winter Garden.

Whether your enquiry is for renovating an existing Glass House or designing a new one you will receive the same courteous and prompt attention.



*If you are contemplating the erection of a Glass House we should be glad to send you interesting and helpful literature to aid you in your choice of a suitable structure.*

**Wm Duncan Tucker & Sons Ltd.**  
ESTABLISHED—1830  
TOTTENHAM. N. 15.

Gilbert Ad. 2548.

# Abol

## Treatise on Garden Pests—Gratis and Post Free

### Abol White Fly Compound

A simple and effective remedy for White Fly on Tomatoes and Cucumbers. No apparatus needed. Very economical. 2½ fluid oz. to 1,000 cubic ft. ¼ pint (5 fluid oz.), 1/-; ½ pint, 1/9; pint, 3/-; quart, 5/-; ½ gall., 8/-; gall., 15/-.

### Abol Fumigating Shreds

Clears Greenhouses of Insect Pests. Safe and Economical. One ounce will fumigate 1,000 cubic ft. No. 1 (1,000 cubic ft.), 1/-; No. 2 (2,500 cubic ft.), 1/9; No. 3 (5,000 cubic ft.), 3/-; No. 4 (10,000 cubic ft.), 4/6.

### Abol Weed Killer (Poison)

For Garden Paths and Walks. Economical and efficacious. One gallon makes 51. Liquid: ½ gall., 4/-; gall., 7/6; 2 galls., 14/6. Powder: To make 12 galls., 2/-; 25 galls., 3/6; 50 galls., 6/-; 100 galls., 11/6.

### Abol Insecticide.

Non-poisonous. A safe, certain and reliable remedy for Insect Pests. Unequalled for Mildew on Roses and other plants. Also improves the plant. Used in the Royal Gardens. ½ pint, 1/4; pint, 2/2; quart, 3/4; ½ gall., 5/3; gall., 9/6.

### Abol Lawn Sand

Renovates impoverished lawns. Destroys the moss and weeds. Packages 10d., 1/3 and 2/3; 7lb., 3/-; 14lb., 5/-; 28lb., 8/-; 56lb., 14/-; 112lb., 25/-.

### Abol Worm Killer

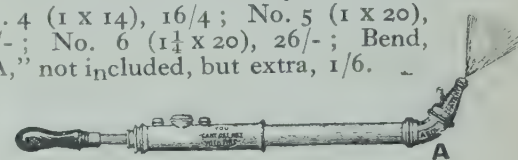
Destroys earthworms in lawns and greens. Enriches the turf. Tin (about 3lb.), 1/4; 7lb. tin, 2/4; 7lb. bag, 1/9; 14lb., 3/3; 28lb., 6/3; 56lb., 11/6; 112lb., 21/-.

### Abol Horticultural Fertiliser

A complete all-round plant food. Highly concentrated. Efficacious and economical. Packages, 10d., 1/3 and 2/-; 7lb., 3/-; 14lb., 5/-; 28lb., 8/-; 56lb., 14/-; 112lb., 25/-.

### Abol Patent Syringes

Give a perfect spray, variable from fine to medium or coarse. Specially recommended by the National Rose Society. Last a lifetime. No. 4 (1 x 14), 16/4; No. 5 (1 x 20), 21/-; No. 6 (1½ x 20), 26/-; Bend, "A," not included, but extra, 1/6.



### Abol Hop Manure

Substitute for stable manure. Bag (about 1 bushel), 3/-; bag (about 4 bushels), 7/-; 3 bags (about 12 bushels), 20/-; 6 bags (about 24 bushels), 38/-; 10 bags (about 40 bushels), 62/6.

### Abol Potato Manure

7lb., 2/6; 14lb., 4/-; 28lb., 7/6; 56lb., 13/6; 112lb., 24/-.

Also Abol Rose Manure, Sweet Pea Manure, Chrysanthemum Manure, Spraying Machines, Hand Cleanser, etc.

### Write for Descriptive Folders

Of all Nurserymen, Seedsmen, Florists, Ironmongers, Chemists and Stores.

Sole proprietors and manufacturers, Abol Limited, 9, Beltring, Paddock Wood, Kent.



## THE TWELVE BEST ROSES

IT might be remarked at the outset that there are no "twelve best roses," for it is fairly certain that no two persons would choose alike, one expert saying that it would be much easier to name the best two hundred rather than the best twelve, more especially as there are now such a vast multitude of excellent varieties available and which are being yearly improved upon and increased.

It may scarcely be necessary to mention that this article was prompted by the perusal of the result of the rose competition in THE GARDEN of October 11th, 1924, recently received, which result interested me greatly, especially as another plebiscite for the "twelve best roses" had just concluded here. These plebiscites have been conducted at intervals in the Melbourne *Argus*—Victoria's leading daily newspaper—at the request and with the co-operation of the National Rose Society of Victoria. The voting usually extends over a period of several weeks, the progressive results being published in the paper from day to day, the public being invited to send in lists of what they consider the twelve best roses for general usefulness and decoration in the garden.

That the rose is, and always will be, the most popular of garden flowers in Victoria it is needless to state, but the fact has been amply proved by the intense interest and enthusiasm which have always attended the progress of the voting. Plebiscites have been held in 1903, 1914, 1920 and November, 1924, and in each vote subsequent to 1903 several new "stars" have had an almost meteoric rise to fame and popularity. In 1914 they were Frau Karl Druschki, Mme. Abel Chatenay and Lyon; in 1920, Miss Marion Manifold, Mme. Edouard Herriot and Mrs. Herbert Stevens; in 1924, Golden Emblem and Sunny South. It is doubtful if any rose has achieved popularity so quickly out here as have Mme. Edouard Herriot and Golden Emblem in their respective years.

The great interest taken by the general public in the voting is amply demonstrated by the fact that hundreds of rose lovers all over the state recorded their votes, while not a few inter-state votes were received from the adjacent states, New South Wales, South Australia and Tasmania; but in spite of this the general opinion as expressed in the vote is chiefly Victorian. The value of the vote to rosarians all over the state is immense, for frequent extracts from letters are published, giving hints of treatment in various soils, conditions, climates and districts, also remarks as to success and non-success with the different varieties; all of which information is of much use to other growers in similar circumstances. New varieties are brought into prominence, and novices receive much help and guidance in the choice of a collection suited to their district and conditions, and knowledge of how to treat their roses after choice is made.

It will, I think, interest many readers overseas to know the result of the plebiscites, which are as follows:

1903.	1914.
La France	Frau Karl Druschki
Maman Cochet	Mme. Abel Chatenay
The Bride	White Maman Cochet
K. A. Victoria	Lyon Rose
Prince C. de Rohan	K. A. Victoria
Maréchal Niel	General McArthur
White Maman Cochet	Belle Siebrecht
Cloth of Gold	La France
Mme. Lambard	Joseph Hill
Niphetos	Prince C. de Rohan
Mrs. John Laing	Rhea Reid
Belle Siebrecht.	Maman Cochet.

1920.	1924.
Mme. Abel Chatenay	Mme. Abel Chatenay
Frau Karl Druschki	Golden Emblem
Miss Marion Manifold	Mme. Edouard Herriot
Lyon Rose	Château de Clos Vougeot
Mme. Edouard Herriot	Frau Karl Druschki
Mrs. Herbert Stevens	Mrs. Herbert Stevens
General McArthur	Lady Hillingdon
Château de Clos Vougeot	Sunny South
Belle Siebrecht	Miss Marion Manifold
Red Letter Day	General McArthur
Lady Hillingdon	Ophelia
White Maman Cochet	Red Letter Day.

It has been found that of the 1903 list only four—La France, the Cochet and Belle Siebrecht—have retained anything of their former popularity, the others have all been superseded in the public estimation. It is interesting to note the positions of these four roses in the several plebiscites, and it is as follows:

	1903.	1914.	1920.	1924.
La France .. ..	1st	8th	13th	19th
Maman Cochet ..	2nd	12th	16th	30th
White Maman Cochet	7th	3rd	12th	16th
Belle Siebrecht ..	12th	7th	9th	13th

It is also peculiarly gratifying to find that two Victorian-raised roses have already achieved the fame of high positions in the voting—Mrs. Marion Manifold in 1920 and 1924, and Sunny South in 1924. As these roses may not be known overseas, I give short descriptions of them. Miss Marion Manifold.—Vigorous climber and continuous blooming. Flowers large, rich velvety scarlet, shaded crimson, full, good form and perfumed. Sunny South.—Very vigorous, with handsome foliage, blooms deep pink flushed with carmine on a yellow base. It quickly makes a big bush covered with flowers, and is a splendid variety for decorative purposes. Has already received a gold medal from the National Rose Society of Victoria.

In the last vote my choice of the best twelve was as follows, the positions they achieved in the vote being shown in parentheses ("unplaced" signifying that those so marked were not included in the first thirty-six).

K. of K. (twenty-fourth)  
Mme. Abel Chatenay (first)  
Sunny South (eighth)  
Mme. Edouard Herriot (third)  
Lady Hillingdon (seventh)  
Lilian Moore (unplaced)  
Frau Karl Druschki (fifth)  
La France (nineteenth)  
Mrs. Herbert Stevens (sixth)  
Isobel (twentieth)  
Caroline Testout (unplaced)  
Belle Siebrecht (thirteenth).

—"AUSTRAL," Geelong, Victoria, Australia.

### CATALOGUES RECEIVED.

Messrs. Andrew Ireland and Hitchcock, Marks Tey, Essex. Flower and vegetable seeds for 1925.

William A. Conway, Kewgardia, East Finchley, N.2. Seeds, bulbs, roses, shrubs, fertilisers, etc.

Messrs. William Power and Co., Waterford. Flower and vegetable seeds for 1925. This catalogue is recommended to all Irish readers.

Messrs. Maxwell and Beale, Broadtone, Dorset. Descriptive catalogue of plants for alpine and rock gardens, moraines and herbaceous borders. Cultural hints are given throughout the pages.

Spear and Jackson, Aetna Works, Sheffield. Retail price list for "Neverbend" spades and forks. This list will be supplied to all ironmongers and hardware merchants on receipt of an order.

Messrs. Kelway and Sons, Langport. Annual manual of horticulture, copiously illustrated by means of numerous half-tone and coloured reproductions. Deals chiefly with hardy herbaceous and hardy border perennials. Special attention should be paid

to the section dealing with peonies, in the cultivation of which Messrs. Kelway's name is known throughout the world. It is a manual which will prove both interesting and instructive to all those engaged in the cultivation of general herbaceous plants.

Messrs. Fisher, Son and Sibray, Limited, Royal Nurseries, Handworth, Sheffield.—Farm seeds for 1925. A handy guide for all farmers.

Nothing gives so much pleasure in a garden as a really good lawn, and to attain that ideal standard one must be careful to employ suitable tools in its care and upkeep. One of the most important lawn implements is the mower, and of these there are many kinds suitable either for large gardens or for ones of smaller dimensions. We have received Messrs. Thomas Green and Son's Catalogue, of the Smithfield Ironworks, Leeds, and we beg to draw the attention of our readers to it. There are many interesting new types in lawn mower construction, all of which are calculated to make for ease and simplicity of working. The catalogue is well illustrated by means of numerous half-tone reproductions, while explanatory notes and prices are given of the various makes.

Messrs. Thomas Carlile, Loddon Gardens, Twyford, Berks.—Hardy plants for 1925. A very fine selection of lupines is offered in this catalogue.

Messrs. C. Engelmann, Limited, Saffron Walden, Essex.—A notable list of perpetual-flowering carnations which merits the attention of all enthusiasts and specialists. This firm is well known throughout the world by reason of its intensive culture of carnations. There are a few novelties for 1925 of their own raising which to all appearance will do fair to outbid in popularity their predecessors. For those who can spare the time, a visit to Messrs. Engelmann's establishment at Saffron Walden to see the plants being raised would prove both instructive and interesting.

### Keen Interest in Horticulture in Bournemouth and District.

—It is proposed to hold a grand floral fête in Meyrick Park, Bournemouth, on June 30th and July 1st. Some special features are to be provided, and valuable cups and money prizes offered. The Bournemouth Chamber of Trade is offering a challenge cup value 125 guineas for the best exhibit in the Show—trade or otherwise. The Bournemouth Corporation offers a 50-guinea cup for the best competitive exhibit; and Mr. P. M. Bright, offers a 50-guinea cup for the best exhibit of carnations. With these cups, which must be won five and three times in all respectively, not necessarily consecutively, there is, in each case, a smaller cup won outright each year, and valuable cash prizes. There are several cups in addition, for roses and sweet peas, and valuable prizes for herbaceous plants, annuals and rock gardens and decorated fruit tables. These big prizes are only open to growers in the United Kingdom.

### National Potato Society.—Appeal for Funds.

—The Committee of the National Potato Society are issuing an appeal in order to meet a deficiency of £200 in their funds. This deficiency has arisen owing to a heavy loss incurred in connection with the Annual Exhibition held at Leicester in November last, and the committee are endeavouring to raise an amount sufficient not only to clear the deficiency but also to provide the nucleus of a prize fund for future exhibitions. During the past six years the annual exhibitions have been promoted without the issue of any general appeal, and the committee would welcome donations or applications for membership of the Society, which should be addressed to Mr. W. H. Morter, Hon. Secretary, Cannon Hill Park, Birmingham.



## SPRAYERS AT HALF - PRICE

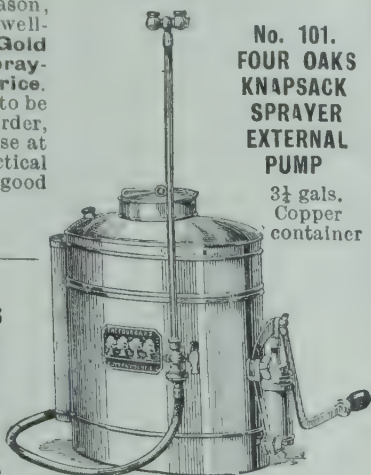
Being end of show season, we have a few of our well-known **Four Oaks Gold Medal Knapsack Sprayers** to offer at half price. They are guaranteed to be in perfect working order, but soiled through use at shows. For all practical purposes they are as good as new machines.



No. 101.  
**FOUR OAKS  
KNAPSACK  
SPRAYER  
EXTERNAL  
PUMP**

3½ gals.  
Copper  
container

**FOUR OAKS  
KNAPSACK  
SPRAYER.  
No. 106.**



Brass Ball Valves, Brass Pump, all working parts outside container. **£2 10 0**

We also have a few soiled **Pneumatic Sprayers, Brass Containers** to offer at half-price as under:—  
1½ gal... 45/- 2½ gal... 55/-  
4 gal... 65/-

**Wonderful Value.**

Only a few machines of each type to offer.

Complete Catalogues free on application.

The original type of Knapsack Sprayer, with rubber diaphragm pump and rubber valves. **£2 10 0**  
3½ gals. copper container

Above prices are for cash with order only, carriage paid, from the Sole Manufacturers:—

**THE FOUR OAKS SPRAYING MACHINE CO.  
FOUR OAKS WORKS, Sutton Coldfield, BIRMINGHAM**

Please mention THE GARDEN when writing.

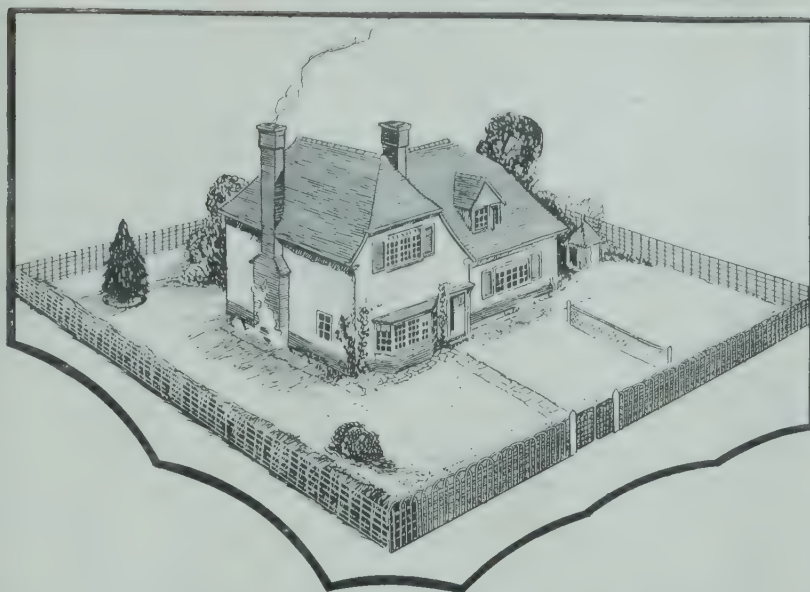
**For  
Orchards  
and  
Fruit  
Trees.**

Nitrate of Soda puts back into the soil what the trees take out—Nitrogen. Helps young trees to grow thrifty and strong; keeps old trees from losing their productiveness.

Read the special pamphlets, entitled "The Manuring of Orchards and Fruit Trees," "Successful Gardens for Every Amateur," supplied gratis and post free by THE CHILEAN NITRATE COMMITTEE, Friars House, New Broad Street, London, E.C. 2.

**Nitrate of Soda**

Please mention THE GARDEN when writing.



## Your Home was Meant to Have a Beautiful Setting

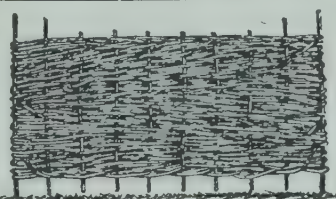
—let this **FREE** fencing Booklet help you choose it

**WOULD** you have folk say of your home "What a gem of a place—how nicely fenced and planned?" Would you have it wear the air of inobtrusive dignity good fencing gives?

Let us send you our **free** Fencing Booklet which takes all the guesswork out of fencing. It demonstrates the charming possibilities of **EMPIRE FENCE** in many styles

**PARKER, WINDER & ACHURCH, LIMITED, Fencing Contractors, BIRMINGHAM.** London: 40, Craven Street, Strand, W.C.2. Manchester: 41, John Dalton Street. Colwyn Bay: Carlton Road.

## EMPIRE FENCES



## WATTLE HURDLES

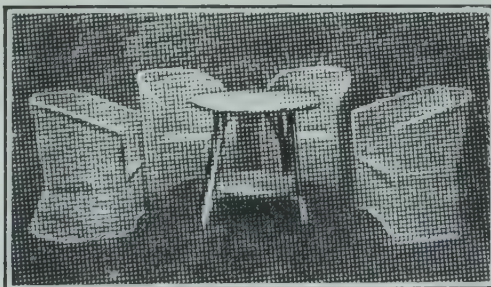
6 feet long

24, 30, 36, 42, 48, 54, 60, 72 inches high

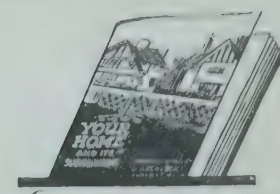
PLEASE STATE QUANTITY.

## Rustic Garden Furniture

In Brown Autumn tint  
Osier, Light,  
Impervious to Showers



**ERNEST R. SMITH & CO.  
Haslemere, Surrey**



free

This illustrated and interesting Booklet "Your Home and its Surroundings" sent free on receipt of a P.C. Just say "Send Booklet E.F.386"

The rustic simplicity of Chest-nut Paling improves with age.



This out-of-the-ordinary Trellis Fencing looks well against shrubbery, etc.



Trellis work and wooden gates give a warm homely touch.



ZFA

**MANURES.** The most complete little book on the subject is "The Manual of Manures," by H. VENDELMANS, 4/5; by post, 4/9. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**GARDEN DESIGN** is best dealt with in "Planning and Planting of Little Gardens," by G. DILLISTONE, 6/-; by post, 6/6. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## NEW CHINESE RHODODENDRONS

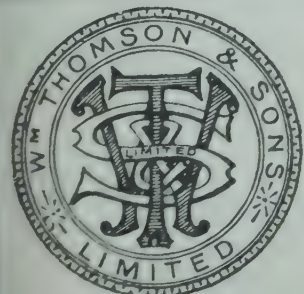
A few superb hardy novelties. Plant in April & May

- R. Clementinæ** (Kingdon Ward 4177), white, suffused pink, darker markings. First discovered by G. Forrest in 1913. 4-5ins. 7/6
- R. racemosum** (Forrest 19404), pink. This is Forrest's finest form; a very suitable shrub for rock gardens or mass planting. 9-12ins. 7/6
- R. fastigiatum forma** (Kingdon Ward 4456). Another fine dwarf species with deep purple flowers and crimson style. 12-16ins. 7/6
- R. muliense** (Kingdon Ward 4023), bright sulphur yellow 9-12ins. 7/6
- R. cephalanthum Series** (Kingdon Ward 3998), varying shades of a rose pink to milk white 7/6
- R. Arboreum Series** (Kingdon Ward 3784), flowers of the deepest crimson. 6-12ins. 10/-
- R. Lapponicum Series** (Kingdon Ward 4184), brilliant lavender-blue. 6ins. 7/6
- R. yunnanense** (Kingdon Ward 4309-4322), bluish pink with brownish crimson markings, one of the best species for the ordinary garden, vigorous under almost any conditions. 8-12ins. 5/-
- R. fictolactum** (Kingdon Ward 4509), pure white with a crimson blotch; magnificent foliage. Worthy of the best situations in the garden. 5-6ins. 10/-
- R. Virgatum Series** (Kingdon Ward 4994) of the deepest pink hue; autumn flowering. 10-12ins. 5/-
- R. Delavayi** (Kingdon Ward 3948), scarlet, with black glands. 9ins. 10/-
- R. "Silver Pink"** (Kingdon Ward 4177), a delicate rose pink with purple markings. 4ins. 5/-

This fine set of twelve for **£4 4s.**

Full list of hundreds of new Rhododendrons on application. When ordering please mention this paper.

**HILLIER & SONS, Tree Specialists, WINCHESTER**



## UNRIVALLED FOR ALL GARDEN CROPS THOMSON'S CELEBRATED MANURES

The result of over 50 years' practical experience in Gardening; still first for quality and results. Safe, sure and lasting. Ask your Seedsman for "Thomson's"

Prices: Vine, Plant and Vegetable Manure—a Perfect Food—1 cwt. 30/-; 56 lbs. 16/-; 28 lbs. 9/-; 14 lbs. 5/-; 7 lbs. 3/-; tins 1/3 and 9d. Special Topdressing Manure—an excellent stimulant—56 lbs. 17/-; 28 lbs. 9/6; 14 lbs. 5/6; 7 lbs. 3/-; tins 1/6 Carriage paid on 28 lbs. and up. Write for free booklet

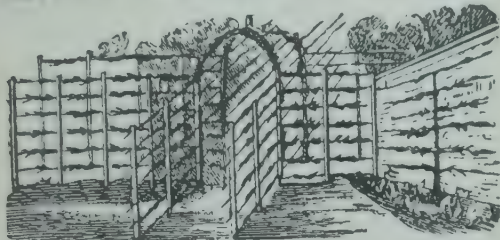
Sole  
Makers:

**Wm. THOMSON & SONS, Ltd., TWEED VINEYARDS, CLOVENFORDS, SCOTLAND**



## HILL & SMITH, Ltd., BRIERLEY HILL, STAFFS,

Makers of  
IRON FENCING, HURDLES, GATES, WIRE  
NETTING AND GARDEN IRONWORK



Other Products—Hay and Grain Sheds, Dutch  
Barns, Galvanized Corrugated Sheets and  
Structural Steelwork. Catalogues free.

London: 8, VICTORIA ST., WESTMINSTER, S.W.1

## WEEDS

One application of

### HARRISON'S Reliable WEED KILLER

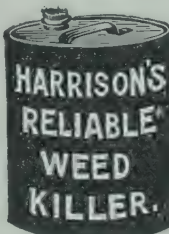
will keep your Garden Paths, Carriage Drives, etc.,  
free from weeds for at least 12 months. The best  
Killer for Daisy, Plantain and Dandelion in Lawns.  
Brightens the Gravel. Immense Saving in Labour.

5 Gallons .. 23/6 Drum .. 12/- extra, Carr. Paid  
10 " .. 42/6 " .. 15/- " " "  
40 " .. 150/- Cask .. 80/- " " "

Irish orders are not subject to these carriage terms but are  
paid to any English port. Full price allowed for all  
drums and casks if returned in good condition carriage  
paid within 2 months.

N.B.—In the prices of the above please  
note that this Weed Killer mixes 1 to  
50 of water, being double the ordinary  
strength. One gallon mixed with 50  
gallons of water will cover an area of  
from 150 to 200 square yards effectively.

**G. HARRISON,**  
Horticultural Chemist,  
READING.



## YOU — OR THE WORMS?

You take pride in the lawn—a real  
pleasure to behold—then worms make an  
unwelcome appearance and the grass gets  
disfigured with mud-casts.

These mud-casts spoil the hard, level  
surface of the grass, be it used for re-  
creation or otherwise.

It is quite a simple matter to get rid of  
the worms. Just sprinkle

### COOPER'S POWDER WORMKILLER

over the grass, water it well in, and see  
how the worms come to the surface.  
Then sweep them up. You have destroyed  
the worms and the mud-cast nuisance  
is over.

Cooper's Wormkiller costs—for 2 lb.  
tin 1/-; 7 lb. bag 1/9; 14 lb. 3/-;  
28 lb. 6/-; 56 lb. 10/6; 112 lb. 18/6.  
Special quotations for ton quantities.

For the destruction of daisies, dandelions  
and similar growths in the grass, there is  
nothing better than

### COOPER'S LAWN SAND.

It fertilizes the lawn as it kills the weeds.  
TRY IT.

Prices—2 lbs. for 1/3; 7 lb. bag 2/6;  
14 lb. 4/-; 28 lb. 7/6; 56 lb. 13/-;  
112 lb. 25/-.

Special quotations for ton quantities.

If your local agent cannot supply your requirements,  
please write to

**WILLIAM COOPER & NEPHEWS, Ltd.,**  
BERKHAMSTED.

There's satisfaction in every "Cooper" product.

## RECORD THE DATES—THE EVENTS ARE GREAT ORGANISERS KINDLY NOTE

### BOURNEMOUTH

First-rate Attractions under the auspices of the  
BOURNEMOUTH FETES, SPORTS AND ENTERTAINMENTS  
COMMITTEE.

**JUNE 30th & JULY 1st**  
**Tuesday & Wednesday**

### MEYRICK PARK HUGE FLORAL FETE

Competitions open to all England. Magnificent  
Challenge Cups, value approximating 400 Gns.  
And Prizes.

Schedules and other particulars obtainable from:—  
R. CHAMBERLAIN, F.R.H.S., CHAIRMAN, Bournem-  
mouth Horticultural Society, and E. S. ROSEVEAR,  
HON. SECRETARY.

Other Events include:—

COMPETITIVE HORSE JUMPING, DOG  
SHOW, POULTRY, PIGEON & RABBIT  
SHOW, GYMNASTIC DISPLAY, ATHLETIC  
SPORTS (A.A.A. Laws), DECORATED MOTOR  
CARS, DANCING, MILITARY BANDS, Etc.

Joint Hon. Secs. { T. H. BEDINGTON,  
R. PERCY,

**TOWN HALL, BOURNEMOUTH.**

## GREAT International Show

AT EDINBURGH

9th, 10th & 11th Sept., 1925

Schedules now ready and may be had on application  
to the Secretary, Donald Mackenzie, S.S.C.,  
4a, St. Andrew Square, Edinburgh.

**WHY** is "HOMES and  
GARDENS" such  
a Great Success?

**BECAUSE** it shows greater  
House Comfort  
& Convenience  
—with less Labour and Expense.

Send to-day for a Free Specimen Copy of this  
helpful and Beautifully Illustrated Magazine  
to 20, Tavistock St., Covent Garden, W.C.2

**Eureka**  
GARDEN HELPS

### WEED KILLER

LAWN SAND,  
EARTHWORM DESTROYER  
SOIL FUME (DIG IN)  
FUMIGANTS, INSECTICIDES, ETC.

See full lists

ASK YOUR AGENT. The Weed Killer  
1/9 size, sufficient to dress 50 sq. yards,  
3/- for 100, 11/- for 400, 77/6 for 4,000  
LARGEST SALE, CHEAPEST TO USE.

If any difficulty in obtaining,  
we promptly send direct to you  
and give name of nearest Agent

ONLY MAKERS  
**TOMLINSON & HAYWARD**  
LINCOLN. LTD.

## KINNELL'S COKE CRUSHER

Reduces Fuel  
to Walnut  
size for  
Long Burning

Large Crusher  
breaks 1 cwt.  
and Small one  
breaks 42 lbs.  
in 20 minutes.



"A very  
useful  
article.  
I am able  
to ensure a  
steady, long  
burning  
fire."  
E. P., ESQ.,  
BELFAST.

Small Crusher for wall .. 20/- Carriage paid  
Small Crusher on stand .. 40/- to Stations  
Large Crusher for wall .. 40/- in England  
Large Crusher on stand .. 60/- and Wales  
Strong Coke Pan, 10/- extra.

**CHAS. P. KINNELL & Co., Ltd.,** (Phone: Hop 362).  
65, 65a, SOUTHWARK STREET, LONDON, S.E.1.

Please mention THE GARDEN when writing.

## "ACME" WEED KILLER AND LAWN SAND

Weed Killer.—Tin to make 25gals., 3/-; for 50gals., 6/-;  
Postage 9d. on each; for 150gals., 15/- carriage paid.

Lawn Sand for destroying weeds and moss.—28lbs., 7/-;  
56lbs., 13/-; carriage paid on lwt., 25/- Fertilizes the  
grass.

**Acme Chemical Co., Ltd., Tonbridge, Ke**

Please mention THE GARDEN when writing.



### LETHORION FUMIGATOR

Certain destruction to all pests in glass houses

Only a match required for starting it!

No. 1 .. For 1,000 cubic feet .. 10/-  
" 2 .. " 1,500 " " " 15/-  
" 3 .. " 2,500 " " " 25/-

Sold by all Nurserymen and Seedsmen.

**CORRY & CO., Ltd., Shad Thames, London, S.**

### SOIL PESTS DESTROYED

by "ALPHOL"  
Sample 14 lb., 3/6 carr. paid

Write for particulars of this and other reliable Garden  
Helps, Lawn Improvers, "Veribest" Seeds, etc., to

Garden Supplies, Ltd., Cranmer St., Liverpool

## WIRE OF 10 USES

Ideal for training fruit trees, peas, beans,  
arches, greenhouses, tomatoes, logans, tying,  
etc. Strong, flexible, steel-stranded,  
waterproof covered. Several thicknesses from  
1/16 to 1/4 in. (full 1,760 yds.) Small lots quoted. Pos-  
to-day for free samples and list of 300 bargains

**GREEN'S, 118, Albert Street, Lyth**

Please mention THE GARDEN when writing.



# THE GARDEN.

**ATERER'S GOLD MEDAL RHODODEN-**  
ONS, Azaleas and Roses, rare Hardy Shrubs, Fruit Trees,  
ries, etc., Alpine and Perennial Plants, Vegetable and Flower  
is, Scotch-grown Seed Potatoes. Catalogue free.—JOHN  
TERER, SONS & CRISP, LIMITED, Twyford, Berks; Bagshot,  
rey; and London.

**AKELEY'S PATENTED HOP MANURE.**  
The original and only substitute for Stable Manure. See  
ert. on p. vi.

**M. DUNCAN TUCKER & SONS, LTD.,**  
rence Road, South Tottenham, N.15.—Conservatories,  
ter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**RDS' BATHS, GARDEN VASES, SUN-**  
ALS, NESTING BOXES. Catalogue (No. 4) free.—  
ORTON, 60, Buckingham Palace Road, S.W.

**VERS' ASPARAGUS.**—Strong roots, one,  
and three years old. Fruit trees, Roses, Vines and Orchard  
use trees of first-class quality. A large stock always on view.  
pection invited. Price list post free.—THOS. RIVERS AND  
, LIMITED, The Nurseries, Sawbridgeforth, Herts.

**LPINES FROM THE FINEST COLLEC-**  
ON in the West of England, 150,000 pot-grown plants,  
uding many rarities. Descriptive Catalogue free. Hardy  
hids a speciality.—BOWELL AND SKARBATT, The Alpine  
eries, Cheltenham.

**ANNED GARDEN NETTING, small mesh,**  
ds. by 1yd., 2s.; 25yds. by 2yds., 4s.; 40yds. by 1yd.,  
3d.; 40yds. by 2yds., 6s. 6d.; 40yds. by 3yds., 9s. 9d.,  
riage paid. Compare our netting with others. Lists now  
dy.—GALLOP, Net Manufacturer, Hastings. Telephone: 352

**D LOVERS OF ROCK GARDENS.**—Inex-  
sive plants for Sale. Apply NELL SHAW, Hatfield Place,  
ch.

**ELLS' CATALOGUE OF CHRYSANTHE-**  
MS now ready, and will be sent post free on application.—  
WELLS & Co., Merstham, Surrey.

**M. ARTINDALE & SON, Nether Green**  
nary, Sheffield, will be pleased to send their Catalogues of  
rdy Plants, Seeds and Gladioli on request.

**LPINES, ROCK PLANTS ONLY.**—Descrip-  
e Catalogue 600 varieties, free.—TERRY LEE, F.R.H.S.,  
Morden Road, Stechford, Birmingham.

**LPINE AND HERBACEOUS PLANTS.**—  
the Mixed Border, for Rock Gardens, large or small, for  
rders in one colour, or for special seasons. We supply Ideas  
well as Plants, and shall be pleased to submit plans.—  
PPARDS, Shawhurst Nursery, Hollywood, Birmingham.

**CK PLANTS, best varieties, inexpensive,**  
free.—MARION GLEDSTANES, Fardross, Clogher, Ireland.

**AN GARDEN COLOUR BE ATTAINED**  
THE DULL WEEKS OF WINTER? Mr. A. J. MACSELF  
wers this question in "FLOWERING TREES AND  
RUBS," his latest addition to the "Home Garden Books."  
a book, for its concise and practical treatment of the subject,  
be welcomed by all keen gardeners. Send for prospectus  
the "Home Garden Books" to the Publishers—THORNTON  
TTERWORTH, LTD., 15, Bedford Street, Strand, W.C.2.

**SWICH RARE SEEDS.** Catalogue de-  
bing nearly 3,000 kinds now ready. Free on application  
THOMPSON AND MORGAN, London Road, Ipswich.

**ERBERT CHAPMAN'S Bargain List of Job**  
e of Choice Daffodils, offered in order to clear ground, is now  
dy, and will be posted to anyone sending a P.C. to HERBERT  
PMAN, LTD., Rother-side Gardens, Rye, Sussex.

**IMPROVE YOUR GARDEN** by the use of  
d Oak Trellis Screens; they are ideal for growing creepers  
all kinds and for securing privacy, at the same time adding  
artistic feature that will last a lifetime (being pickled in  
servative). No trouble to erect (being made in sections).  
d for lists and get an estimate from W. T. REVITT, Railway  
rks, Olney.

**BARR'S FLOWER & VEGETABLE SEEDS,**  
of finest selected strains and tested growth, also the best Scotch  
grown, hand-picked Seed Potatoes, strong Asparagus Plants, etc.

**BARR'S HARDY PERENNIALS, ALPINES,**  
ROCK PLANTS, AQUATICS, CLIMBERS, TALL and DWARF  
FLAG IRISES, etc., for Spring planting.

**BARR'S LILIES, GLADIOLI, DAHLIAS,**  
CANNAS, MONTBRIETIAS, ANEMONES, BEGONIAS,  
TUBEROSES, TIGRIDIAS, &c., for Spring planting. Catalogues  
free.—BARR & SONS, King Street, Covent Garden, W.C.2.

**THE DOUGLAS CLOVES AND BORDER**  
CARNATIONS; glorious scent, stiff stems, and continuous  
flowering. The new crop of seed is now ready to sow. 2s. 6d.  
and 5s. per packet. Plant catalogue now ready.—J. DOUGLAS  
(The Premier House for Carnations), Gt. Bookham.

**A FEW SHRUBS WORTH GROWING :**  
Embothrium, Tricuspidaria, Pittosporums, Mimosa (6 sorts),  
Hardy Eucalyptus, Eupatorium, Chianthus, Habrothamnus,  
Viburnum tomentosum, Coronilla glauca, Sollya heterophylla,  
Drimys Winteri, Calceolaria violacea, also Hardy Tree Ferns,  
Woodwardia and Chamerops. We solicit your enquiries.—  
TRESSEDER & Co., Nurseries, Truro.

**IRON AND WIRE FENCING FOR GAR-**  
DENS.—Ornamental Iron and Wire work of every description.  
Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue  
G. 65. Wood and Iron Gates. Catalogue G. 103. Kennel  
Railing. Catalogue G. 86. Poultry Fencing. Catalogue G.  
70. Ask for separate lists.—BOULTON AND PAUL, LIMITED,  
Norwich.

**ALL PROFESSIONAL GARDENERS should**  
become Members of the British Gardeners' Association. Full  
particulars (stamp).—JOHN WEATHERS, 1, Park View, Isleworth.

**SEWAGE DISPOSAL FOR COUNTRY**  
HOUSES.—No emptying of cesspools; a perfect fertiliser;  
no solids; no open filters: perfectly automatic; everything  
underground. State particulars.—WILLIAM BEATTIE, 8, Lower  
Grosvenor Place, Westminster.

**JAMES BACKHOUSE, F.L.S., F.R.H.S.,** for  
many years chairman of the late firm of James Backhouse and  
Son, Limited, having retired from York, offers his services as  
Garden Consultant. 30 years' experience, specially in connec-  
tion with Alpine and Herbaceous Plants. Advice given for  
Rock Garden construction and planting, also for permanent  
Flower Borders, boundary Plantations, etc. Address for terms  
to CAER FEGLA, Arthog, North Wales.

**LAXTON'S NEW SEED CATALOGUE,** con-  
taining Novelties for 1925, New Pea "Bedford Champion"  
and "Laxton's Progress," post free on application. Fruit  
Tree Catalogue and Cultural Hints can also be sent, post free,  
on request.—LAXTON BROTHERS, Nurserymen, Bedford.

**YORK STONE PAVINGS,** crazy or rect-  
angular, rustic copings, steps, roughly squared or random  
shaped, flat bedded wallstones, garden edging, rockery, etc.—  
SAMUEL JOHNSON AND SON, Quarry Owners, Mirfield, Yorkshire

**CHOICE NEW CHRYSANTHEMUMS.**—Our  
Catalogue of nearly 900 varieties, including Grand Novelties for  
1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready.  
Post free on application.—J. W. COLE AND SON, Chrysanthemum  
Specialists, Peterborough.

**PRIMULA, ALPINE AND PERENNIAL**  
Seeds, from large (1,500) collection, sold cheap. List free.  
REV. J. F. ANDERSON, Glenn Hall, Leicester.

**GARDEN NETS.**—Best tanned, small mesh,  
25yds. by 1yd., 2/-; 25yds. by 2yds., 4/-; 25yds. by 3yds., 6/-;  
25yds. by 4yds., 8/-. Carr. paid. Satisfaction guaranteed.  
Tennis nets from 10/-. Special nets for tennis boundary. Pea  
training nets. Lists and samples free.—G. JARRETT, Net-  
maker, Rye.

**CANADIAN AND AMERICAN GLADIOLI.**—  
The best of the standard varieties and novelties.—J. W. CROW,  
Simcoe, Ontario, Canada.

**TENNIS COURT FENCING.**—A speciality.  
Made up as complete enclosures, with standards, wire, and  
straining posts, from 6 ft. to 12 ft. high. Write to Dept. FP/G  
for particulars.—BOULTON AND PAUL, LTD., Norwich.

**SUTTON'S GOLD MEDAL GLADIOLI.**

Our choice selection of 36 Bulbs, in 12 showy varieties, s. d.  
adapted for masses or clumps .. .. 6 6  
50 in 10 choice varieties .. .. 10 6  
SUTTON AND SONS, THE KING'S SEEDSMEN, READING.

**DOBBIE'S 1925 CATALOGUE AND GUIDE,**  
136 pages, 194 illustrations. Free to all readers. Please mention  
THE GARDEN when writing.—DOBBIE & Co., LTD., Edinburgh.

**BATH'S SELECT SEEDS AND PLANTS.**—  
New Illustrated Catalogue of choice Vegetable and Flower Seeds  
and Plants is now ready, and will be sent post free on application.  
—(Dept. E), R. H. BATH, LTD., Floral Farms, Wisbech.

**CHEAP GOVERNMENT WIRE ! ! ! Great**  
for training fruit trees, peas, beans, hops, arches, greenhouses,  
tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-  
stranded and waterproof covered. Several thicknesses from 19/6  
per mile (full 1,760 yards). Postcard to-day for free samples and  
list of 300 bargains.—GREEN'S GOVERNMENT STORES, 69, Albert  
Street, Lytham.

**FIDLER'S NEW ILLUSTRATED GARDEN**  
SEED GUIDE AND CATALOGUE FOR 1925 IS NOW  
READY, and a copy will be sent post free to any address on  
receipt of a post card.—Write at once to FIDLER & SONS, Royal  
Berkshire Seed Stores, Reading.

**108 GLADIOLI for 8s. 9d. post paid.**—The  
most dazzlingly brilliant flowers on earth, with spikes of  
blooms 18ins. long; 12 each of 9 kinds (108 bulbs), all separately  
packed and named, for 8s. 9d., post paid; half lot, 4s. 9d.,  
post paid (cultural instructions and beautifully illustrated  
Flower and Vegetable Catalogues included).—J. KAY AND Co.,  
Goodmayes Road, Goodmayes, Essex.

**BEGONIAS AND GLOXINIAS.**—Kay's prize  
strain with blooms often measuring 8ins. across; a collection  
of 12 Single and 12 Double Begonias, also 6 Gloxinias—all  
separately packed and named, with cultural instructions and  
illustrated catalogues, for 6s. 3d., post paid; half lot, 3s. 6d.,  
post paid.—J. KAY AND Co., Goodmayes Road, Goodmayes,  
Essex.

**HEDGING PLANTS :**  
PRIVET: Strong, English-grown, bushy and well rooted,  
30-36ins. .. .. at 13s. per 100  
36-40ins. .. .. at 15s. per 100  
QUICKTHORN: Extra bushy,  
24-30ins. .. .. at 10s. per 100,  
All Carriage Paid on 1,000 Lots. — HODSONS, Castlegate  
Nottingham.

**MICHAELMAS DAISIES.**—Pyrethrums and  
other hardy perennials. For new catalogue write to Mrs.  
THORNELY, Nursted, Devizes.

**MATTHEWS' big production Fertilisers.**—  
Thousands of tons sold annually. For prices, see THE GARDEN,  
January 24th, 1925 (page vii). Catalogue of Scotch Seed  
Potatoes and Seeds on application.—JAMES AND GEORGE H.  
MATTHEWS, Harold Wood, Essex. 'Phone Romford 284.

**SALVIA "VATICAN."**—Lovely mauve, 3 ft.,  
rosy bracts, lasts long in beauty, 2/6 free. Orders booked for  
Crimson Velvet Scabious.—Mrs. PHILIP MARTINEAU, Wellsbridge  
Cottage, Ascot.

**GARDEN NETTING.**—Best selected, small  
mesh, tanned, 25 by 4 yds., 8/-, or 8 yds., 16/-. Carriage paid.  
Tennis Nets and Standards. List free.—STRAWBERRY NETTING  
Co., 5, Suffolk Terrace, Lowestoft.

**LOOK ! TANNED GARDEN NETS.**—All  
orders despatched same day. 25 yards by 1 yard, 2/-; 25 by 2,  
4/-; 25 by 3, 6/-. Odd netting for bushes, 6 lbs. for 2/6. All  
carriage paid. Any sizes supplied. Also Tennis Boundary Nets.  
—MOORE & Co., Net Works, Rye.

**GREENHOUSE PAINTING AND GLAZING.**  
—"Vitrolite," superior to White Lead Paint, 18/6 per gallon,  
cans extra. "Plastine," the Imperishable Putty, 32/- per cwt,  
kegs extra; 7lb. tins, 4/- post free; 14lb. tins, 5/6 each, carriage  
extra, tins free.—Full particulars from W. CARSON & SONS,  
Grove Works, Battersea, S.W.11.



## ECKFORD'S GIANT FRILLED SWEET PEAS FOR 1925

**GORGEOUS FLOWERS. MAGNIFICENT STEMS**  
For a wealth of cut flowers.  
For garden decoration. For exhibition

**ECKFORD'S ARE THE WORLD'S BEST**

**Special Offer.**—25 specially chosen 1/- packets of Eckford's Giant Frilled Sweet Peas for 1925, each separate and named for 20/-  
The same 25 half-packets, each separate and named, for 10/-  
The above are a gorgeous range of colour

WRITE FOR CATALOGUE FREE. Also pedigree vegetables and choicest flower seeds

**HENRY ECKFORD, THE Sweet Pea Specialist Wem, Shropshire**

Please mention THE GARDEN when writing.

## SEED POTATOES

	Cwts.	56lbs.	28lbs.	14lbs.
May Queen	16/-	9/-	5/-	2/9
Duke of York	13/-	7/-	4/-	2/3
Midlothian Early	13/-	7/-	4/-	2/3
Sharpe's Express	11/-	7/-	4/-	2/3
Sir John Llewellyn	12/-	7/-	4/-	2/3
Eclipse	11/-	7/-	4/-	2/3
Sharpe's Victor	16/-	9/-	5/-	2/9
Epicures	14/-	8/-	5/-	2/9
British Queen	11/-	7/-	4/-	2/3
Immune Ashleaf	14/-	8/-	4/-	2/-
Edzell Blue	18/-	10/-	5/-	2/6
King Edwards	9/-	5/-	3/-	1/6
Rhoderic Dhu	14/-	7/-	4/-	2/-
Ally	16/-	8/-	4/-	2/-
Great Scot	14/-	7/-	4/-	2/-
Kerr's Pink	14/-	7/-	4/-	2/-
Majestic	14/-	7/-	4/-	2/-
Tinwald Perfection	12/-	6/-	3/6	2/-
Golden Wonder	12/-	7/-	4/-	2/-
Arran Victory	18/-	10/-	5/-	2/6
Arran Chief	11/-	7/-	4/-	2/6

Sacks free Free on Rail Cash with order

SEND FOR LIST OF OTHER VARIETIES

**J. W. CROSS POTATO GROWER Elm Road, WISBECH.**

Please mention THE GARDEN when writing.

Items of  
Interest from  
New Malden.

**GLADIOLI.**

We have a very fine Selection of Gladioli Bulbs in the following varieties:—

Halley, red.  
Marechal Foch, clear pink.  
Schwaben, yellow.  
Panama, deep pink.  
America, rose.  
Wilbrink, flesh pink.  
Prince of Wales, salmon.  
Prinsepine, scarlet.  
War, blood red.  
Francis King, red.  
Glory of Holland, white.  
A. Wigman, sulphur yellow.  
L'Immaculee, pure white.  
Brenckleyensis, scarlet.  
Baron Hulot, indigo blue.  
Elizabeth, dark rose.  
Loveliness, creamy pink.

1/6 per Doz. 9/- per 100.

48-page Illus. Catalogue on application.

**HAMPTON PLANT CO.,**  
7, New Malden, SURREY.

'Phone: Malden 330. Bankers: Barclays.

Please mention THE GARDEN when writing.



# AWAY WITH THE WEEDS

## ROOT & CROP

In what sort of a state are your paths after the abnormal rains and floods? Have the weeds got a hold? If so, don't waste valuable time in plucking or hoeing them out; much the simpler way is to *kill* them with

## COOPER'S WEEDICIDE

Just add 100 parts of water to each measure of Weedicide (a gallon for 300-400 sq. yards of surface), stir, place the mixture in watering-can, then sprinkle the paths, carriage drives, etc., which will soon be clean and bright. And what is important they remain so over a long period.

Prices: Pt. 2/- Qt. 3/3 1/2 gall. 5/6 1 gall. 9/- 2 galls. 17/- 5 galls. £1/18/6

**HERCULEAN LIQUID WEEDKILLER**—half the strength of Weedicide (1—50)—but equally effective.

Prices: Pt. 1/8 Qt. 2/9 1/2 gall. 3/9 1 gall. 6/- 2 galls. 10/6 5 galls. £1/5/-

## The Glen Road Iris Gardens

SPECIALIZE IN RARE AND FINE  
VARIETIES OF BEARDED IRISES

Send for List

Grace Sturtevant, Prop.  
Wellesley Farms . Massachusetts . U.S.A.

## WM. ARTINDALE & SON, NURSERYMEN — SHEFFIELD

Winners of the

SIR ALBERT STEPHENSON SILVER CUP AT THE  
SOUTHPORT FLORAL FETE FOR GLADIOLI  
—CATALOGUES ON APPLICATION—

## SEEDS McHATTIES' SEEDS

EXHIBITION SPECIALITIES

MASTERPIECE ONION - - per pkt., 6d. & 1/-  
IMMENSELY RUNNER BEAN - - per pint, 2/6  
IMPERIAL EXHIBITION BROAD BEAN, per pint 1/-

The above are a few of our Scotch Strain for Show purposes. WRITE FOR LIST, post free.

**McHATTIE & CO.** Scotch Seed House, CHESTER

## VIOLETS FOR BEDS, ROCK GARDENS AND NATURALIZING.

**MISS STANISTREET** can supply now healthy young plants, properly selected and packed by an expert, from her Unique Collection of over 50 Varieties.

: : Descriptive List Free. : :

**KILLALOE, CO. CLARE.**

Try our "**Marvel**" Collection of dependable seeds for a 300 yards' plot, carriage paid for 5/-  
Potatoes excluded! Catalogue included!

**UPSTONES, Seed Experts, ROTHERHAM**

## Michaelmas Daisies

For all the latest and most beautiful varieties see the Raiser's List.

**ERNEST BALLARD, Colwall, MALVERN**

## TREE SEEDS

Large collection of Evergreen, Tree, Shrub, and Hardy Perennial Seeds from all parts of the world

SEND FOR CATALOGUE

**CONYERS B. FLEU, JR.**

6628-30-32 Ross Street

GERMANTOWN :: PHILADELPHIA, U.S.A.

## CHRYSANTHEMUMS

We are fully equipped to supply your wants in really first class stock of choicest **Chrysanthemums** and **Perpetual-Flowering Carnations**.

Write for our General Catalogue or Novelty List, with useful cultural hints included.

**KEITH LUXFORD & CO.**

Sheering Nurseries, HARLOW, ESSEX  
and at Sawbridgeworth, Herts.

## Reliable Lincolnshire Seed Potatoes

**Specialty Selected Stocks.**—Sharpe's Express, Eclipse, Sir John Llewellyn, British Queen, King Edward's, Queen Mary, Ally and Majestic. Large or small quantities

—When writing please state quantity required to—

**W. DENNIS & SONS, LTD.**

(Dept. No. 12), KIRTON, BOSTON, LINCOLN

## HERBERT'S GOLD MEDAL PINK

Acknowledged to be the finest in the World. Unsurpassed for border or pot culture, of robust constitution, free flowering, unique colouring, and delightful fragrance.

Received Ten Awards of Merit.

Lists Free.

**C. H. HERBERT, Nurseries, Hazelwood Road, Acock's Green, BIRMINGHAM**

## STORRIE'S Unique and Descriptive Catalogue of Seeds, Transplanted Plants is now ready. If you have not yet received a copy a Postcard will bring you one.

**STORRIE & STORRIE, The Specialists**

Glencarse, PERTHSHIRE.

## CAULIFLOWER "MAY QUEEN"

The fastest growing, quickest heading variety in existence. Planted in March, large white heads may be cut during May and June. Plants, ready now, 3/6 for 100; 500 for 16/-; 1,000 for 30/-. Carr. paid. Packed in boxes, with cultural hints.

**DANIELS & SON, WYMONDHAM, NORFOLK.**



# ARTINDALE'S SPECIAL SPRING OFFER OF STRONG, WELL-GROWN HARDY PLANTS

Finest Varieties of

**PHLOXES, DELPHINIUMS,  
IRISES, PYRETHRUMS and  
ORIENTAL POPPIES, etc.**

The best set of beautiful hardy flowers ever offered  
We guarantee every plant is a strong established root

Artindale's Hardy Flowers secured premier awards  
at the leading Shows in Great Britain during season  
1924. This is a strong recommendation for our stock.

Customers taking advantage of purchasing the whole of the  
Collections will receive *extra plants gratis*

## A1 COLLECTION of CHOICEST NAMED 12 Strong PHLOX 8/- carr. paid

Baron Van Dedem, scarlet, blood-red.  
Caran d'Ache, bright salmon-rose.  
Frau H. Gerz, milk-white.  
Mrs. A. Baker, dark salmon-rose.  
Iris, purplish-blue.  
Oxara, large pink.  
Selma, beautiful pink, cherry-red eye.  
F. A. Buchner, pure white.  
Flora Hornung, white, carmine eye.  
Border Beacon, salmon-scarlet.  
Muriel Rogers, pink, red eye.  
Emmanuel Arene, rosy-mauve.

## A1 COLLECTION OF FINEST 12 Strong DELPHINIUMS 15/- carr. paid

Andrew Carnegie, sky-blue, large flowers.  
Belladonna Semi-Plena, lovely clear blue.  
Cephalina, pale blue, mauve centre.  
Courage, pale blue, semi-double.  
Moerheimi, white.  
Perfection, grand light blue, very fine.  
Hereward, fine bright blue.  
Lize Van Veen, Cambridge-blue.  
St. John, pretty blue.  
Ustane, light blue, light mauve centre.  
Yvette Quilbert, pure bright blue.  
Zuster Lugtens, dark blue.  
Choice Seedlings, strong clumps, 6/- doz.

## A1 COLLECTION OF FINEST SINGLE AND DOUBLE 12 Strong PYRETHRUMS 9/- carr. paid

Mme. Munier, exq. pink.  
On. Mary, fine light pk.  
Vance, cream, tinted flesh.  
White Aster, pure white.  
J. N. Twerdy, crimson,  
golden centre.  
Yvonne Cayeux, primrose.  
Decoy, rosy-crimson.  
Comet, bright carmine.  
Hamlet, rich pink.  
J. Kelway, rich bold crim.  
Mrs. B. Brown, crimson,  
large flower.  
Standard, rosy-carmine.

## 6 very choice FLAG IRIS 6/- carr. paid

Argus, violet and purple.  
Empress of India, beautiful light blue (NEW).  
Lohengrin, cattleya-pink.  
Maori King, golden yellow, deep velvet petals.  
Mrs. A. Gray, beautiful lilac.  
Ingeborg, ivory-white (early).

## 6 ORIENTAL POPPIES 5/- carr. paid

Col. Bowles, grand large scarlet, strong stiff stems.  
Grossfurst, scarlet, the largest variety.  
Mrs. Perry, apricot-pink.  
Royal Scarlet, beautiful scarlet.  
Silver Queen, silvery pink.  
Princess Ena, salmon shaded carmine.

## ARTINDALE'S A1 COLLECTION of the FINEST 12 HERBACEOUS PLANTS 9/- carr. paid

1 Anchusa, Opal .. .. .	Each	9d.
1 Armeria, Ruby .. .. .	"	1/-
1 Delphinium, Perfection .. .. .	"	1/6
1 Stative latifolia .. .. .	"	9d.
1 Gypsophila, Double .. .. .	"	1/6
1 Heuchera, Pluie de Feu .. .. .	"	9d.
1 Iris, Empress of India .. .. .	"	1/6
1 Peony, Mons. Ch. Leveque .. .. .	"	1/6
1 Poppy, Colonel Bowles .. .. .	"	1/-
1 Phlox, Baron Van Dedem .. .. .	"	9d.
1 Scabiosa caucasica .. .. .	"	9d.
1 Ranunculus, Fair Maid of France .. .. .	"	9d.

Catalogue on application.

**WM. ARTINDALE & SON**  
Florists, Nether Green, SHEFFIELD

# REAMSBOTTOM & CO'S GAY GARDEN GOLD MEDAL ST. BRIGID ANEMONES

NONE GENUINE WITHOUT OUR GOLD MEDAL SEAL  
Wonderfully improved in Form and Colours.

FEW FLORAL SIGHTS CAN  
COMPARE WITH A GOOD  
BED OF THEM.

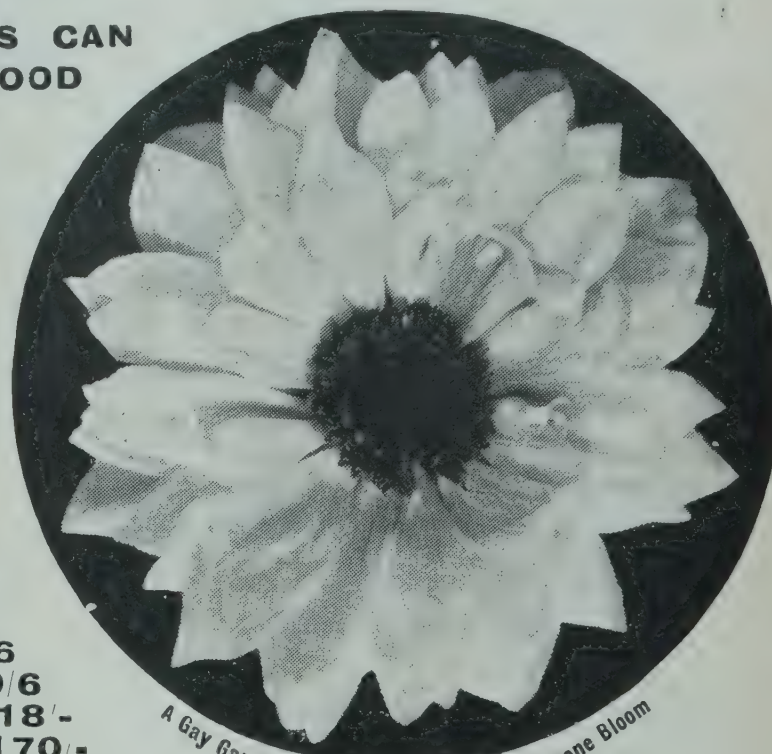
## PLANT NOW.

### REAMSBOTTOM & CO'S LATEST IMPROVED "GAY GARDEN" GOLD MEDAL ST. BRIGID ANEMONES

are the finest in the world.  
NONE ARE GENUINE WITH-  
OUT OUR GOLD MEDAL SEAL

12	..	..	..	3 -
24	..	..	..	5/6
50	..	..	..	9/6
100	..	..	..	18/-
1,000	..	..	..	170/-

Full Cultural Directions sent that  
will ensure success to every Amateur



## ALSO PLANT NOW

**ALDERBOROUGH ICELAND POPPIES** (Papaver nudicaule). Extremely free flowering, and much appreciated for cutting purposes; the size and beauty of our White, Yellow and Orange shades, which we have exhibited, caused great admiration. New shades from Pinks to Citron and light Yellows are included in our splendid mixture White, Yellow, Orange, separate colours, or Glorious mixture of all shades, 6, 1/3; 12, 2/-.

**AQUILEGIA (COLUMBINE)**, Long Spurred. We have raised superb varieties, vastly superior to ordinary columbines. The exquisite shades and colourings of our special strain delight all purchasers. For cutting purposes few flowers are more decorative. Selected, 6, 2/6; 12, 4/6.

**ASTER KING GEORGE (NEW)**. EXTRA large-flowering Michaelmas Daisy; huge bunches bluish-violet blooms. 1/6.  
**BERGAMOT (MONARDA DIDYMA)**. The deliciously scented true fragrant Bergamot, with striking scarlet flowers produced in whorls up the stem. 2, 1/4.

**CANTERBURY BELLS**. No flowers will give you a more brilliant display than our superb mixture, including every known colour, and the glorious Cup and Saucer varieties, for which we are famous throughout the Kingdom. Special Exhibition Mixture, 12, 1/9; 24, 3/3; 50, 6/-; 100, 10/6. Miss Kennedy, Bishop Cottage, Fortrose, N.B., writes: "Canterbury Bells supplied by you have been so admired that people have come from villages all round to see them, and wonder where such could be had." Please plant at once.

**CHRYSANTHEMUM MAX. FIANCEE (NEW)**. Very showy new large white Ox-eye Daisy; strongly recommended. 1/-.

**CISTUS (ROCK ROSE)**. Mixed, invaluable for rockeries or alpine gardens, flourishes in any light, well drained soil. 3, 1/4; 12, 4/6.

**DIGITALIS GRANDIFLORA (FOXGLOVE)**. Mixed, very strong fine plants, good variety of mixed colours. 6, 1/3; 12, 2/6.

For other varieties, also Roses, Fruit Trees, etc., please see our ILLUSTRATED CATALOGUE FREE.  
All Cash orders of 15/- value and over carriage paid or post free, packed by experienced hands. For Free Delivery, smaller orders, 5/-, 10/-, add respectively for Carriage or Postage, etc., 1/- and 1/9. Safe Arrival and Satisfaction Guaranteed.

# REAMSBOTTOM & CO.

Tower Nurseries, West Drayton, Middlesex (Also at Geashill, Ireland)

Please address to Tower Nurseries, WEST DRAYTON, and mention THE GARDEN when writing.

**EDELWEISS**. This very hardy, much-sought-after alpine plant has pretty silvery foliage with star-shaped silvery flowers. 2, 1/3.

**GAILLARDIA GRANDIFLORA**, our splendid improved extra large-flowered; choicest rich yellow with crimson or brown markings. 4, 1/4; 12, 3/6.

**GENTIANA ACAULIS** (the glorious Blue Gentian). Extremely hardy; prized wherever hardy flowers are grown; very dwarf. 3, 2/3; 12, 7/6.

**HEUCHERA SANGUINEA**. Known as "Coral Flower." Numerous spikes of exquisite coral; charming for cutting. 2, 1/3; 12, 7/-

**HOLLYHOCKS, SINGLE**. These stately perennials should find a place in every garden where old-fashioned flowers are prized. Our selection, mixed. 4, 1/3; 12, 3/6; 25, 6/6.

**LUPINUS ROSEUS (PINK LUPINS)**. Our glorious strain of these hardy perennial Lupins, most lovely shades of pink. 2, 1/3; 6, 3/-.

**PANSIES**, brightest colours, giant, velvety blooms. 12, 1/6; 30, 3/-; 50, 5/-; 100, 9/6.

**PHLOX EVELYN (NEW)**. Large flowers and immense size; richest salmon-rose shade; an exquisite novelty. 1/6.

**PHLOX FIREGLOW (NEW)**. Huge trusses of brilliant orange-scarlet, with dark centre. 1/6.

**PRIMULA OBCONICA GRANDIFLORA HYBRIDS**. These are valuable window or garden plants, and never seem to be out of bloom, mixed colours, cerise to crimsons. 3, 1/6; 6, 2/9; 12, 5/-.

**RED HOT POKER TRITOMA UVARIA**. One of the most noble autumn-blooming plants; the blooms resemble so many torches. 2, 1/4; 7/6 doz. Selected 1/- each 10/6 doz.

**SWEET WILLIAMS**. Wonderful Giant Mixture. Our strain is a wonderful variety of colours, and Customers are always delighted with the very large flowers. Giant Mixture. 15, 1/9; 50, 5/-; 100, 9/6.

**FREE MONEY SAVING BONUS COUPON**. — 20 per cent. worth of Additional Plants FREE over delivered carr. paid on orders over 5/- value if you enclose this coupon. — Quail, T.G.



**FOR SPRING PLANTING**

THE EXECUTORS OF THE LATE

**ANTHONY WATERER**

BEG TO OFFER

**STANDARD TREES**

In Great Variety

Consisting of:

**LIMES, PLANES, ELMS, etc.****EVERGREEN and DECIDUOUS  
SHRUBS, viz.:**

BOX, green and variegated, 3 to 8 ft.

HOLLIES, Common, 5 to 8 ft.

" Variegated and Green varieties, 2 to 6 ft.

THUIOPSIS BOREALIS, 10 to 12 ft.

CUPRESSUS LAWSONIANA, 12 to 14 ft.

SPRUCE FIRS, 6 to 8 ft.

CEDRUS ATLANTICA GLAUCA, very fine, 10 to 14 ft.

OSMANTHUS, PHILLYROEAS, SPIROEAS, LILACS,  
VIBURNUMS, etc.**GOLDEN YEW**A magnificent Stock in all shapes and sizes from  
2 to 10 ft.

AZALEAS in great variety, 2 ft. to 8 ft.

RHODODENDRONS, without doubt the finest stock  
in the trade of named varieties 2 to 6 and 8 ft.RHODODENDRONS, Standards, in best named  
varieties.HARDY HEATHS in great variety, and a good stock of  
General Nursery Stock.

CATALOGUES UPON APPLICATION.

Enquiries and Inspection invited.

**KNAP HILL NURSERY**  
**Woking Station :: SURREY**

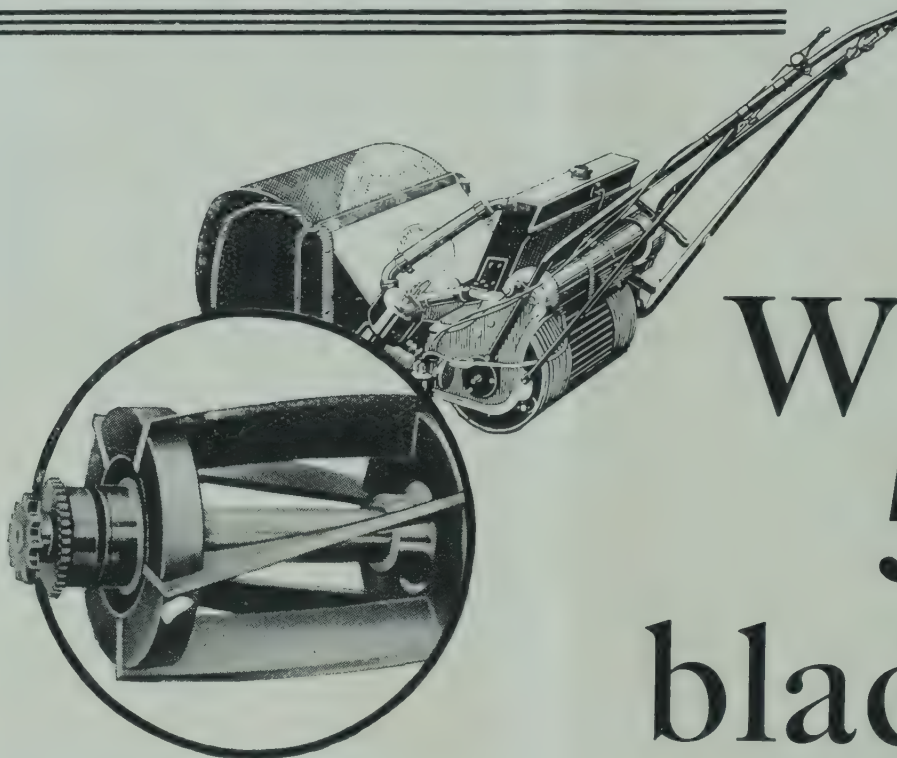
Please mention THE GARDEN when writing.



Please mention THE GARDEN when writing.

**FOSTER &  
PEARSON  
LIMITED**

Established 1841

Please write for Estimates  
for durable Greenhouses,  
Boilers, etc., to**BEESTON  
NOTTS****Why  
5  
blades**

We might have put seven — some have nine even. **HERE'S THE REASON**, the fine heavy steel blades of the 'Governor' revolves at 1,200 revolutions a minute at walking pace, which gives a cutting speed of 100 a second. This eliminates any tendency to rib the grass, and ensures a clean, even cut at all speeds. The cylinder itself is mounted on a double row of ball bearings which reduces all friction.

In like manner, throughout its entire construction, the 22" 'Governor' Patent *Water-Cooled* Motor Mower is a sound engineering proposition, built to cut grass quicker, easier, better and more economically than ever before. Results have justified our policy, and we offer the 'Governor' to you as the finest Motor Mower you can buy.

**Therefore — choose the  
Water-Cooled "Governor"**

Price  
22in. Water-Cooled

**£75**

22in. Air-Cooled

**£65**

Guaranteed 12 months.

# **GOVERNOR**

## **MOTOR LAWN MOWER**

(WATER-COOLED)

Write for Illustrated Booklet to Sole Proprietors:

**JOHN SHAW & SONS, WOLVERHAMPTON, LTD.** (Dept. 12), Wolverhampton  
Est. 1795.

Please mention THE GARDEN when writing.

**1925**CATALOGUE of  
Perpetual-Flowering**CARNATIONS**If you are interested and would like a  
copy, post your name and full address to:

**C. ENGELMANN, Ltd.,**  
**SAFFRON WALDEN, Essex**

**ROCK GARDEN SUBJECTS****Alpine Plants, Miniature  
Conifers, Shrubs**in 2,000 kinds, including over  
180 kinds of Saxifrages alone.

**BORDER PLANTS** including  
over 50 kinds of Hellebores,  
**FLOWERING SHRUBS, etc.**

ALL THE BEST.

FREE CATALOGUE shows how to  
make a water garden, tells about making  
a rock garden, soils, etc., and methods  
of planting. Personal attention to orders  
and enquiries.

Over 50 years of experience  
in growing hardy subjects.

**Messrs. J. STORMONTH & SON**  
**Kirkbride, by Carlisle**

Please mention THE GARDEN when writing.



Please mention THE GARDEN when writing.



# GLADIOLUS

FIRST-SIZE BULBS.  
FINEST VARIETIES

	per doz.	100
America, lilac rose .. ..	1/6	10/0
Baron Hulot, indigo blue ..	1/9	12/6
Glory of Holland, pure white	1/9	12/6
Golden West, orange-scarlet ..	1/9	12/6
Halley, delicate salmon-pink ..	1/6	10/6
Love's Fire, coral scarlet ..	2/6	17/6
Loveliness, creamy white ..	2/3	15/0
Niagara, nankeen-yellow ..	1/9	12/6
Panama, deep pink .. ..	1/9	12/6
Schwaben, soft yellow ..	1/9	12/6
War, deep blood red .. ..	1/9	12/6
White Giant, pure white ..	1/9	12/6
COLLECTION 100 in 10 varieties .. ..	13/6	
" 120 " 12 " .. ..	16/6	
" 240 " 12 " .. ..	30/0	
Primulinus Hybrids ..	1/5	10/6

All Bulbs Carriage Paid. Catalogue Free.

**WM. POWER & CO.,**  
**WATERFORD.**

Please mention THE GARDEN when writing.

## Toogood's Seeds



The same labour, the same tools, the same manures—  
WITH OUR GUARANTEED GARDEN SEEDS  
ADDED—will yield for you an infinitely better Garden  
than ever before. Send a postcard to-day for our  
160-page beautifully illustrated

**FREE GUIDE TO  
GUARANTEED  
GARDEN SEEDS.**

Every packet ordered thence MUST grow for you  
and please you or you will get it replaced freely:  
and the seeds cost less to buy. Address us personally:

**TOOGOOD & SONS, Ltd.,**  
Seedsmen to H.M. the King, **SOUTHAMPTON.**

Please mention THE GARDEN when writing

Notes from Maidstone.

### DELPHINIUMS

It is still safe to plant Delphiniums. Our List, which will be sent post free contains all the best varieties, such as Rev. Lascelles, The Alake, King of Delphiniums, Mrs. Shirley, Mrs. Townley Parker, Lord Derby; while the beautiful nemophila blue Queen Mary is now offered at the special price of 2/6 each, as we have worked up a good stock.

IRIS may still be planted, and we shall be pleased to send our List.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Maidstone.

Established 1796.

No. 4



The  
Park Keeper

Men who appreciate  
The  
**ATCO**  
MOTOR MOWER

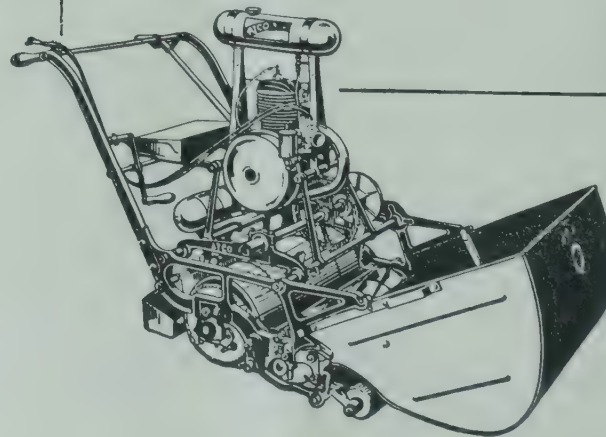
The letter shown above, received from the Corporation Parks Committee of a leading city, amply proves the adequacy of the ATCO Motor Mower where large extents of grass have to be maintained in good condition.

The ATCO is used regularly by many leading Corporations. May we arrange free demonstration on your own grass?

16 inch Model £50 22 in. Model £75. 30 in. Model £95  
Personally Delivered and Guaranteed 12 months

Send for free booklets, "Turf Needs" and "Notes of Praise."

**CHAS. H. PUGH, Limited**  
Whitworth Works, 31, Tilton Road, BIRMINGHAM



CITY OF BIRMINGHAM  
PARKS AND CEMETERIES DEPARTMENT.  
PITMAN BUILDING,  
161, CORPORATION STREET,  
BIRMINGHAM.

TELEPHONE 40—  
Central 4375-7-8-9.  
ESW/AMW

26th March 1924.

ALL COMMUNICATIONS TO BE ADDRESSED TO THE SECRETARY

Dear Sirs,

Atco Motor Mowers.

I beg to inform you that the Parks Committee of this City were so satisfied with the working of the motor mower obtained from you last year for trial purposes, that they have now given instructions for twelve more to be obtained, and an order has been sent to you for these machines.

Yours faithfully,

*J. H. White*  
Secretary.

Messrs Charles H. Pugh Ltd.,  
Whitworth Works,  
Tilton Rd.





VOL. LXXXIX.—No. 2784.

MARCH 28, 1925

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
Entered as Second-class Matter at the New York, N.Y., Post Office.

## NATIVE PLANTS

WITH the approach of spring everyone gets a touch of wanderlust. Whether it drags us overseas or to a nearby hedgerow we have an earnest desire to explore, and the result of such exploration is usually the collection of a plant or plants. Of wild plants from abroad I have nothing to say at the moment except that at the right season you can see hardy townsmen arriving any evening at Victoria each bearing parcels of varying shapes and sizes. From the jealous care which is shown to these parcels one would imagine that they contained the latest creation from Paris or a seasick baby; not at all, they are the result of strenuous days in the mountains, of hours of climbing, of digging with a trowel, of trouble with the Customs. They are alpine plants which can usually be bought for a shilling or two a dozen from a nurseryman.

Perhaps I am a little unkind in speaking in this way, for after all a plant which you have collected with your own hands is worth dozens of bought plants. Their sentimental value is great. Many of these plants collected in the hills on the Continent will thrive with ordinary care. Very different is the case of most wild plants in the British Isles. Many of these, in fact most of the smaller native wild plants, prove exceedingly stubborn in cultivation. Take Lords and Ladies as an instance. In many parts of the country it is exceedingly common, but try to transplant it to surroundings where it is not found in a wild state and nine times out of ten it will be as stubborn as a mule and refuse consistently to thrive or to spread.

It is often said that enthusiasts who comb the country in order to find our rare native plants are jealous by nature. They will produce some prodigious rarity and refuse to tell their best friend where they found it. The reason, no doubt, is partly that the plant is really very rare and they realise that if they describe its habitat the supply will rapidly be exhausted; but there is another and, I think, far more sound reason, and that is that the plant is obviously by nature difficult, else it would be found in greater quantities as a wild plant. If it is miffy in its native state, it is obvious that it would be a terror to grow in a garden and so perhaps it is better to leave it where it is.

I should say that our native plants are the most difficult to grow successfully in gardens, followed by those from the Rocky Mountains as a close second. The third would probably be New Zealand plants. By this, of course, I mean plants from areas where the climatic conditions are either the same

or more severe than at home. On the other hand, the percentage of plants from the European Alps or from China which are cultivatable must be large.

No doubt there is some scientific explanation for the miffiness in cultivation, particularly of our native alpine plants, but I think that this can be explained in simple terms. It is largely a question of food. Supposing that a human lived and thrived under meagre conditions and that suddenly his food was altered while everything else was kept the same. Instead of 8oz. of nourishment being assimilated every day, his interior economy was called upon to digest 2lb. of richer food every day. For a period there would be great internal derangement. The average life of a human is from sixty to eighty years, while of a small plant it may be as many months, and their internal adjustments are just as complicated as those of an animal.

It might be imagined that plants from abroad would be liable to derangement to an even greater degree, but I think that is not so, for in the case of native plants only one factor is really altered, that of richness of food, while those from abroad have to approach life from a different angle in many details. It is often easier for a human to change his entire method of existence than to alter it essentially in only one detail.

This may appear to be a feeble explanation of the difficulty of growing our native plants in our gardens, when all the various factors and exceptions are taken into consideration, but I think there is a modicum of truth in it. One thing is certain, that the rarer a native is in a wild state the more difficult is it to acclimatise in our gardens.

I have not touched upon the ethics of growing native plants in our gardens, as this is a question on which opinion is divided. Personally, I can see no objection to it other than the fact that the majority of them grow better in their native haunts, but there are many gardeners to whom the cultivation of our rarer natives is anathema. I suppose it depends upon whether we look on our gardens solely as a collection of plants or as a spot which is peaceful, and where our senses are rested and satisfied. Apart from the question of plant collecting there is an infinite joy in looking for and examining plants in the wild. It is just as satisfying to see a fine group of *Dryas octopetala* in full bloom on the Scotch hills as it is on the Alps. There are many places in this country which have a magnificent flora, and yet they are only known to a few enthusiasts, and of these most of them look but do not touch.

E. H. M. C.



# EUROPEAN PRIMULAS

THERE ARE FEW PLANTS SO PLEASANT TO GROW AS THE PRIMULA, AND THOSE OF THE GENUS WHOSE NATIVE HABITAT IS THE EUROPEAN ALPS ARE AMONG THE MOST SATISFACTORY OF ALL FOR GARDEN PURPOSES.

**I**N PRIMULA MARGINATA we have a most pleasing and satisfactory subject for the rock garden, sound and reliable in every respect, ranking among the best, and is worthy to, and should, be included in every collection of good alpinists.

rosettes which sit tight on the woody ancient-looking stems, so characteristic of the plant. In the early spring as the new leaves unfold, the plant presents an extremely handsome appearance, being practically enveloped in thick cream-coloured meal, this being particularly distinct on the margins of the beautifully notched leaves, and although heavy rains wash the greater part of the meal away, the bold white margin still exists. If the plant is grown in the alpine house the mealy appearance is more or less preserved. The flowers are borne in May and June on 3in. or 4in. stems, several blossoms constituting a head. Its culture is of the simplest type, it being perfectly happy in an ordinary, gritty, well drained compost, preferably where it can enjoy a choice, sunny, perpendicular crevice, but it will grow and thrive in any ordinary sunny pocket. Although it prefers lime this substance is by no means essential for its well being. It has many stations in the European Alps, occurring both on limestone and granite formations. As time goes on it will be found that the stems get rather straggly and somewhat unsightly. If the tops are cut away, however, fresh buds will break in plenty down the old stems, and the tops will root readily in sand and provide new robust young stock.



PRIMULA FARINOSA, THE BIRD'S EYE PRIMROSE, A DAINTY SUBJECT FOR THE ROCK GARDEN.



THE ATTRACTIVE VIOLET PURPLE FLOWERS OF PRIMULA MARVEN.

There are, of course, a great many forms of this charming plant, colours varying in all shades of lavender, lilac, purple and violet, and rarely white; the size and shape of individual blossoms also vary considerably, some being large or small, starry or round, but, generally speaking, all types are good. The foliage is of a stout leathery texture and is formed into sturdy

PRIMULA MARGINATA VAR. LINDA POPE.—This variety, which may possibly be a hybrid, is one of the finest forms of the type. It possesses all the good qualities of *P. marginata* in an enhanced degree, rendering it an ideal plant for the alpine house. Comparatively little difficulty ought to be met with in its cultivation, provided it is treated like the type. Of late years it has become very rare, and nowadays can only be procured from a limited number of nurserymen. Style and habits favour *P. marginata*, although the leaves are much larger, and more deeply notched; while the flower stem is more sturdy with a dense head of large sumptuous blossoms of a lavender colour with a mealy white eye. The blossoms are as round as could be desired.

In PRIMULA × MARVEN we have another plant of great reputation and one that is often sought for in vain, since it is now as rare as Linda Pope. One parent of this delightful hybrid is *P. marginata*, but I do not think it is possessed of foliage quite so handsome, although it is well powdered with farina, and is sturdy and compact. The flowers are very attractive, of a violet-purple shade, much enhanced by their conspicuous pure white eyes. They are also freely produced in heads, the stems of which just appear above the foliage. It is a good doer in a well drained compost in a cool corner.

PRIMULA FARINOSA (the bird's eye primrose), is indigenous to Britain, and is a dainty little subject for the rock garden or for naturalising in grass, to which it is accustomed. For association with other plants in the alpine lawn it is also ideal, or planted with *Myosotis rupicola* it provides a splendid combination of colour. As the name implies, the plant is wholly



covered with farina, which gives its foliage and flower stalks a silvery grey appearance. The leaves are formed in the shape of a dwarf rosette, sitting close to the ground, and are long and narrow, while the flower stalk varies in length, from 3 ins. to 6 ins., headed by a group of delightful pale pink golden-eyed flowers. Colours do not differ to any marked degree. Sometimes one may pick out an extra deep coloured specimen or a much paler form, or even, very rarely, a pure white one, but none is prettier than the usual type. As regards its position on the rock garden, a sunny aspect is suitable, in a compost of good turfy loam, well drained, and where its roots are cool. Plant among other dwarf alpine to obtain good results. It flowers about May or June and sets abundant seeds, by which it is propagated.

**PRIMULA SCOTICA.**—Simply the Scotch form of *P. farinosa*, but not so satisfactory to cultivate, very often dying out after flowering. I think it sometimes flowers so much as to kill itself. Only this last summer I noted odd plants that produced three distinct crops, and on each occasion ripened all their seed. The grey, powdered leaves are short and broad and the deep purple flowers are borne in heads on 2 in. stalks, making the plant a perfect miniature of the type. Treatment as for the latter.

**PRIMULA LONGIFLORA.**—The beautiful species that has a wide distribution, in the European Alps occurring in the high alpine meadows. It resembles *P. farinosa*, but its rosy pink or lilac flowers are larger and the corolla tube is very much longer. The leaves are very similar, being pale green covered with meal, but slightly larger. Position and compost as for *P. farinosa*.

**PRIMULA HIRSUTA** is an easy and free-flowering alpine that is capable of making a showy patch of colour in a choice corner in the rock garden fairly rapidly, producing short, sturdy tufts of leathery leaves which are densely covered with fine brown hairs, more noticeable perhaps round the serrated leaf margins. The flowers appear in heads just above the foliage, or may

even be snugly nestled among the leaves. Again there is much variety in colour, but usually rosy pinks predominate, albinos rarely occurring. A nice sunny pocket or crevice in a well drained mixture of loam and leaf-mould will be found quite satisfactory. It seeds readily, and numerous first-rate hybrids have been derived from it, one of the best being

**PRIMULA HIRSUTA** Mrs. J. H. Wilson, which made a splendid new addition for the rock garden a few years ago, having the same free-flowering qualities, together with a sound and hearty constitution. The flowers, borne in May on heads on 3 in. stems, are of a bluish-purple colour, with a white eye. The foliage of all the hybrids is more or less alike, and cultural details also. It may be noted that although a sunny position is advised, a cool root-run should also be provided. Other noteworthy hybrids include *P. h. Ruby*, of a ruby red shade with an eye of purest white; *P. h. The General*, with flowers of an uncommon shade of a rosy terra-cotta; and *P. h. Ladybird* with mealy leaves and flowers of a dull red, the heads carrying them being exceptionally large and round.

**PRIMULA PALINURI** belongs to the auricula group, but seems rare in cultivation. Its leaves are large, smooth and of a bright green colour, and it increases from a rambling woody rhizome. The flowers droop in loose heads, similar to cowslips, and take the form of golden yellow trumpets; these, by the way, are sweet scented. For the rock garden it needs a sheltered position, facing west, and delights in a warm limestone crevice, in loam and peat.

**PRIMULA AURICULA CILIATA** is a very dainty and choice species, desirous of a well drained sunny ledge in the rock garden, in a gritty limestone mixture. It is small and neat in all its parts, having leaves of a dull green, covered with minute silky hairs, giving them a smooth, velvety appearance. The flowers are bright yellow and hang loosely in heads on short slender stems in June or thereabouts.

F. BARKER.

(To be continued.)

## PLANTING THE WATER AND BOG GARDEN

(Continued from page 159.)

THE mention of foliage by the waterside introduces a note that is one of the essentials for success in such planting. Broad, massive foliage shows to better advantage by the waterside than anywhere in the garden, and the noblest genus for the purpose is the gunnera. The Chilean species, *G. scabra*, is the one most frequently met with, and is a plant of noble proportions, but *G. manicata* grows larger, and where it can be planted should be used. Both require plenty of room and should never have any other vegetation crowded close to them. As they have been known to attain a size of 20 ft. or so across and their bold, handsome leaves sweep right down to the ground, it is obvious that other plants have little chance in competition with them.

The rheums, or ornamental rhubarbs, are also effective and bold. *R. palmatum sanguineum* with its crimson veins and giant foliage is always beautiful, but is never so attractive as when its towering spikes are rising 6 ft. or more, delicately tinted amber, soft green or vivid scarlet, sometimes all three at once.

Then there are the rodgersias with leaves like the chestnut and flowers of various tints, the best of which are *R. æsculæfolia*, pale pink; *R. pinnata*, deep rose; and *R. tabularis*, creamy white. All prefer shade and love moisture.



WATER LILIES—THE REAL GEMS OF THE WATER GARDEN.

Before leaving the large foliage plants I must mention *Saxifraga peltata* (giant saxifrage). Delightful pink flowers rise from the ground in early spring before the leaves develop, but the true beauty lies in the succeeding foliage. Three feet high, beautifully veined and netted, this is one plant I would always have in the water garden to the exclusion of many others. It is equally happy in shade or sunshine.

But despite the nobility of the bolder-leaved plants, the water garden would never be the fairy land it can be without its sedges, rushes, reeds and grassy-leaved plants.

*Eulalias* (syn. *Miscanthus*) *japonica* and *gracillima* are two of the lightest forms. *E. saccharifer* is a giant grass growing 6 ft. and over on occasion, and its rich green, boldly arched foliage is a note of distinction in itself. The lyme grass, too (*Elymus glaucus*), with its beautiful blue-grey masses of foliage, makes an effective colour note. Funkias enjoy the shadowed recesses higher up the bank. *Pennisetum latifolium* is a very decorative grass 5 ft. or 6 ft. high. Phormiums (New Zealand flax) are excellent plants used sparingly at definite points. *Stenanthium robustum* lights up the scene with large cream plumes of flower. Of *arundos*, the grassy-leaved *A. conspicua*, with plumes like pampas grass, is very beautiful



in the proper place; but the best of them is the giant Mediterranean reed, *Arundo Donax*, of which the best form is that known as *macrophylla glauca*, with delightful blue-grey leaves, that towers to a height of 8ft. or 10ft. and yet never loses its graceful outline.

But the water garden would be very poor indeed without its aquatics. Indeed, with me there is a feeling that all I have mentioned hitherto only exist to frame the picture of the water garden proper.

First there are the semi-aquatics. The sweet flag (*Acorus Calamus*) cool to look at and sweet when crushed in passing it. A variegated plant that, like those I have previously mentioned, loses nothing by its variegation is *Acorus japonicus foliage variegatus*. *Glyceria aquatica* will ramble along the banks and out into the shallow water and impart a lovely moonlight effect. The juncus, also, particularly the porcupine rush, *J. zebrinus*, add grace and beauty to the picture. The bog or buck bean (*Menyanthes trifoliatus*) will creep along the shallow margins. The blue-flowered water hyacinth *Pontederia cordata*, is a charming plant where it succeeds, but this is not everywhere. Then there are the arrowheads. (*sagittarias*), of which the Japanese form *S. macrophylla* is the best of the singles and *S. variabilis* fl. pl. the only good double. A true water-loving plant is *Zizania latifolia* (wild rice), which reaches a great height in a very short space of time. It will also reach a great distance from the spot in which it is planted unless kept in check.

The flowering rush (*Butomus umbellatus*) and the typhas (reed mace) are invaluable, and form excellent backgrounds for water lilies, as well as serving to shelter and protect them against wind or running water. *T. latifolia* is a plant for large areas only. *T. stenophylla* is a smaller-habited plant for the

exists for them, for are they not its aristocracy, its fairy queens and princesses. I think it was Mirabeau who said that "God gave to Woman two-thirds of all beauty." This may be so, but I think that when the vials of beauty were being poured forth it must have been by the waterside, and some was spilt on the surface and became water lilies. No flowers can create quite the same emotion in the lover of all things beautiful as do the water lilies, and none possesses quite the exquisitely moulded forms or purity of colour that is found in them. Orange hearts in crimson goblets. Golden jewels nestling in snowy whiteness. All the rich glow of ruby and garnet, the soft pink of the rose, and the delicate flesh tints of an artist's dream are combined with a beauty of form and purity of outline that Nature in all her wonderful works has never excelled and rarely emulated. To describe even a reasonable number of the best is impossible. I will therefore content myself with naming some that should always be planted when opportunity arises.

For water 1½ft. to 2ft. in depth: *Atropurpurea*, crimson purple; *Aurora*, rose flushed yellow to salmon; *Ellisiana*, bright rosy red, deeper in centre, sometimes rather shy flowering; *Froebeli*, wine crimson; *James Brydon*, very deep rose, brown foliage, a marvel to flower; the *Laydeckeri* varieties, *fulgens*, *purpurata* and *lilacea*; *odorata alba maxima* and its pink form *Exquisita*, both vanilla scented; *W. B. Shaw*, bright rose pink; *Wm. Falconer*, deep crimson, perhaps the best of all deeply coloured for shallow water.

For deeper water, 4ft. being deep enough to plant any variety, although many will, once started, find their way into several feet more and succeed: we have *Colossea*, delicate shell pink, fragrant; *Escarboucle*, rich vermilion, anthers and all; *Gladstoniana*, the noblest white; *marliacea carnea*, free flowering shell pink; *m. rosea*, glorious flowers of soft rose; *tuberosa*, a solid white flower that reminds one of an exquisitely carved marble, very fragrant; *t. Richardsoni*, an improvement as to size on *tuberosa*, but scarcely so free flowering, I think. The limits of space and not of really first-class varieties must end the list here.

The water and bog garden possesses characteristics that are found in no other department. It has within its compass an atmosphere all its own. The subtle niceties of colour blending and colour grouping are hopelessly impossible here. You may try it, but it will beat you in the end. All growth is luxuriant, all its denizens are adventurers, and will ramble far from their own appointed place if you let them. Restraint is an unknown quantity, and in the garden regions the water garden usually hangs suspended between luxuriant civilisation and beautiful savagery. Leave it uncared for and it will soon make of itself a glorious, but, to the gardener, maddening wilderness. But however mad or wild it may become, it will be beautiful still. Colour, reflected from the bank above, dyes the water below to a crimson or golden wash. The splash of the vole or stirring wind sends ripples across the waters and gently sways the floating gems upon its surface. The music in the rustle of the reeds and rushes, the white floating clouds reflected in its depths, the sombre shadows under the giant leaves and the riot of colour on every hand: all these and many more are the pleasures of the water garden from early spring until late autumn.

GEO. DILLISTONE.



SAXIFRAGA PELTATA BY THE STREAMSIDE.

water garden of moderate size, and the tiny reed mace, *Typha minima*, is a very pretty plant when bearing its little brown clubs. Plant it somewhere—just in the shallow water—if you can get it.

Of the true aquatics, that is, those plants that send their roots into the depths but whose leaves and flowers float on the surface. The most attractive are the native yellow flowered *Villarsia nymphaeoides*, the yellow British water lily (*Nuphar advena*), the frog bit (*Hydrocharis Morsus-ranæ*) with its little brown floating leaves and yellow flowers, and the water hawthorn (*Aponogeton distachyon*) that flowers from the very early days of spring (I have seen it and smelt its delicious odour in March) until the last leaves have fallen from the surrounding trees in autumn.

I have long ago filled the space allotted to me by the Editor for this article, and I awaken to the fact that the real gems of the water garden, the *nymphaeas*, or water lilies, must be crowded into a few brief lines. The whole water garden

it will be beautiful still. Colour, reflected from the bank above, dyes the water below to a crimson or golden wash. The splash of the vole or stirring wind sends ripples across the waters and gently sways the floating gems upon its surface. The music in the rustle of the reeds and rushes, the white floating clouds reflected in its depths, the sombre shadows under the giant leaves and the riot of colour on every hand: all these and many more are the pleasures of the water garden from early spring until late autumn.

GEO. DILLISTONE.

AMONG OTHER ARTICLES IN OUR NEXT ISSUE WILL BE

EARLY-FLOWERING CHRYSANTHEMUMS, by Norman Lambert.

GARDEN PAVING, by R. V. Giffard Woolley.

EUROPEAN PRIMULAS.—II., by F. Barker.



## THE SO-CALLED MAHONIA JAPONICA

**A**S Mahonia—or, as it is more usually called, *Berberis japonica*—we frequently meet a fine evergreen shrub in the gardens of Great Britain as well as of the Continent. There are two or even more apparently distinct forms of it, of which one with larger, broader, more rounded and somewhat less spiny-toothed leaflets is known by the name var. *Bealei*. This one was introduced from China by Fortune in 1845, and Lindley described it in 1850, regarding it as identical

and that he "has seen no typical specimen of *M. japonica* collected outside Japan." He does not say anything as to the relationship of this species to others, and only under *M. Fargesii* he points out the resemblance of its leaves to those of *japonica*. In my opinion, *M. Fargesii*—or, at least, what I take for it—seems to be much nearer *M. Bealei*, while some facts seem to indicate a relationship of *M. japonica* to *M. philippinensis* Takeda. *M. tikushiensis* Hayata, too from



MAHONIA BEALEI WITH ITS SOMEWHAT STIFF AND DENSELY ERECT INFLORESCENCE.



THE TRUE MAHONIA JAPONICA, CHARACTERISED BY LOOSE AND STRAGGLING FLOWER CLUSTERS

with *Berberis japonica* Sprengel (1825) or *Mahonia japonica* De Candolle (1821). Fortune himself took the Chinese form for a distinct species (*Gardeners' Chronicle*, 1856, page 112), an opinion already held by Carrière, who described *Mahonia Bealei* in "Flore des Serres," X., page 166 (1854-55). Hooker, in following Carrière and Fortune, pictured the plant and what he called var. *planifolia* in the *Botanical Magazine* on Plates 4846, 4848 and 4852 (1855), from specimens sent to him from Messrs. Standish and Noble's nursery, where Fortune had sent his seed. Later, Fedde and most of the other authors have united the Chinese form with the Japanese one, calling the first *M. japonica* or var. *Bealei*.

The last monograph of the genus *mahonia*, H. Takeda (in Notes, Royal Botanic Garden, Edinburgh, January, 1917) has been the first to explain that the true Japanese *mahonia* has nothing whatever to do with the Chinese forms cultivated in our gardens and called *M. japonica*. During my stay in the Arnold Arboretum from 1915 to 1919 I had the opportunity to study the material of the genus *mahonia*, and to see also the specimens investigated by Takeda. I have not yet published the results of my own investigations, but in this note I shall say what I know about *Mahonia japonica*, which even now is far from being sufficiently understood.

According to Ito (in Jour. Linn. Soc. Bot. XXII, 428, 1887) this plant does not occur spontaneously in Japan. Statements to this effect given by Miquel and Franchet et Savatier, or even Matsumura, are wrong. Keiske Keisuke Ito (translation of Matsumura, 1883) says: "This plant has never been found wild. It is said to have originally come from Ha ku san (mount) of the province of Kaga. But it is now everywhere cultivated in gardens." E. H. Wilson, who so carefully studied and collected the woody plants of Japan, did not observe a wild specimen, nor did he detect such a specimen in one of the Japanese herbaria. Takeda, too, states that the species has not yet been observed in a wild state,

Formosa, may be near to *japonica*, but, unfortunately, I know Hayata's species only from his description, and it is not yet mentioned by Takeda.

After all, I cannot decide the question of the origin of *M. japonica*. Most of the plants cultivated under this name are *M. Bealei*. Fedde, who apparently was not aware of the real differences between *M. japonica* and *M. Bealei*, did, in 1905, mention that Giraldis had collected several specimens of *japonica* in Shensi. I have seen no specimen of this collector giving proof of Fedde's statement. I presume that the plants Giraldis found belong to *M. Fargesii*. One is easily inclined to believe that *M. japonica*, like so many other plants, originally came to Japan from China. According to a Japanese garden book, a *mahonia* was introduced to Japan from China in 1684. Takeda, however, is not sure whether this was *japonica* or Fortunei, neither is he certain where the plant really came from. There is, in my opinion, a great probability that the real *japonica* did not come from China, but from Formosa, or even the Philippine Islands. It is or has been in cultivation in our gardens, but at present almost all the plants bearing this name belong to *M. Bealei*. I have, at least, hitherto never met with a flowering plant of the true *japonica*.

One of the flowering specimens here figured seems, however, to represent the Japanese species, and comparing it with the other picture of the true *M. Bealei*, we get a rather good idea of the different aspects of the two species. As Takeda first pointed out, the two plants "may show some resemblance in foliage under abnormal circumstances, yet an absolute distinction can always be seen in the inflorescences." The leaflets of *M. Bealei* usually are somewhat broader and upon the whole larger than those of *M. japonica*, which mostly possess one or two teeth more on the lower margin of the leaflet. The racemes of *M. Bealei* are, as a rule, rather stiff, erect, densely beset with flowers and with bracts not exceeding 4mm. in length, and the ovaries, according to my observations, contain



three to four ovules. In our picture the inflorescences are still young, and may later become somewhat looser; but in *M. japonica* the racemes are always rather slender, straggling or somewhat pendent, more loosely beset with flowers and with bracts that measure from 5mm. to 8mm., the ovaries of the few flowers I could investigate containing from four to six ovules.

I should like to know whether there is a distinct difference in the colour and size and perhaps the fragrance of the flowers, and in the colour and size of the fruits of the two species. I should be grateful to anybody who could send me flowering or fruiting specimens of what seems to be the true *M. japonica*, or of forms of *Bealei* not quite agreeing with the one pictured.

CAMILLO SCHNEIDER.

## G O R S E

BY DR. R. LLOYD PRAEGER.

IN THE GARDEN THIS USEFUL GENUS OF SPRING SHRUBS IS OF EXTREME VALUE FOR PLANTING IN SITUATIONS UNSUITED FOR OTHER SHRUBS AND IN ADDITION IS MOST EFFECTIVE WHEN DRAPED WITH MASSES OF GOLDEN FLOWERS.

"WHEN the gorse is out of bloom kissing's out of fashion," runs the old saying; and if considered generically, not specifically, the botanical side of the analogy is fairly correct. For it takes more than one species of gorse to carry us the round of the seasons. The common gorse, *Ulex europæus*, puts forth tentative sprays of bloom (particularly in mild districts) from October onward; early spring sees it in full glory, and June is waning before the last blossom disappears. July presents difficulties, but by August the two remaining British species, *U. Gallii* and *U. nanus*, are beginning to flower, painting the heaths with gold in September and October, and still lingering till *U. europæus* begins again.

*Ulex* is a compact little genus of some twenty species, which evidently first arose in south-western Europe, for all the species save three or four are confined to Spain or Portugal (or both) and the others have a western range. The three kinds already mentioned as British are the most northern

British Isles shows its southern origin, for though it is abundant where it occurs, it haunts only the milder parts, mainly western England and Ireland. The third species, *U. nanus*, shows a more marked preference for a warm home, being confined to the south of England. It is the smallest of the three, a little prostrate shrub, with short spines and quite small flowers. None of the many Iberian species appears to be hardy, and one very seldom hears of any of them in British gardens. I have seen a few of them in Portugal, and it seems to be just as well for the peace of mind of English botanists that these gorses have not spread northward, as they appear to be among the most puzzling groups in the flora of the Peninsula.

An excessive and vindictive thorniness is characteristic of the whole genus. In the old days we were taught that thorns were a special provision of nature to prevent animals from eating the plants possessing them, and it was pointed out in support of this theory that thorny plants are especially characteristic of poor ground and desert places, where vegetable food is

scarce. This was putting the cart before the horse. There can be no doubt that thorniness, representing as it does a restriction of growth, is an economical measure on the part of the plant, and a protection against undue loss of water, such as is likely to occur in deserts: the fact that it also protects against grazing beasts being quite by the way. The shrubby members of the pea family are to a great extent inhabitants of poor and dry ground, and in other groups besides *Ulex* we find thorny ends to the branches and thorns replacing leaves. The so-called needle whin of our moist heaths is an excellent example in the genus *Genista*, and *G. hispanica*, *G. dalmatica* and others look exactly like little gorses; *Erinacea* derives its name from its suggestion of a vegetable hedgehog; *Ononis* and other genera include thorny members in their family circle.

But from the defiant groves of gorse what a wealth of glorious blossom bursts forth in spring! Where else shall we get such a blaze of colour, such an intoxicating

warm fragrance! No wonder the story is told (whether true or not I do not know, nor does it matter) that Linnaeus, coming from gorseless Sweden (or, as some sages sing, Dillenius, coming from gorseless Darmstadt), fell on his knees before so glorious a vision. And the story has a deep significance, for nowhere in the world, so far as my limited knowledge goes, is there anything that surpasses a field of gorse. Gorse and purple heather (the latter also a west European plant, and unknown, like the gorse, to the benighted inhabitants of central Europe)—these two, at their best, are without a peer. On Alpine slopes



A GLORIOUS PATCH OF GOLDEN YELLOW PROVIDED BY THE DOUBLE GORSE.

representatives, and of these *U. europæus* alone ventures north of Britain, being present in Denmark. I remember finding, with some astonishment, a few bushes on the East Frisian Islands (the discovery was appropriate, the occasion being my honeymoon and the date very near April 1st), but Professor Conwentz, to whom I showed specimens, scouted the idea of its being native there. It is reported as introduced into Bavaria also. *U. Gallii* resembles generally the last species, but is smaller and neater in all its parts, greener in colour, with flowers of a deeper gold. Its distribution in the



we find more intense pigmentation, more varied tints: but for sheer overpowering mass of colour, commend me *Ulex europæus* and *Erica cinerea*.

A particularly pleasing trait of the gorse (and, indeed, of the heather too) is that it flourishes on ground which without it might often be rather barren and desolate.

All the gold in Ballytearim is what's stickin' to the whin;

All the crows in Ballytearim has a way of gettin' thin.

But while the heather succeeds in this by sheer economy of growth—thin twiggy stems and tiny leaves, aided possibly by the beneficent companionship of root-fungi—the gorse has a special private fund on which to draw, which it shares in common with other leguminosæ. I refer, of course, to the bacilli imprisoned in the peculiar root-tubercles. These bacilli, as is well known, possess the power (denied to the higher plant) of directly assimilating nitrogen—that most precious of plant-foods; the gorse is able to plunder this store, giving in exchange food and shelter; and so the two live happily together to their mutual advantage. So far as one can see, the bacilli might easily escape from their prison and live independently; but the gorse and its companions, in the absence of their tiny friends, might well go bankrupt and have to migrate to some new home where a richer soil would give a better margin of profit on the annual turnover.

Although their upland habitat might suggest an especial hardiness for the gorses, their European distribution warns us that in Britain they are near the limit of their climatic range. *U. nanus*, indeed, frankly keeps to southern England. As regards the other two, the absence of *U. Gallii* from Scotland (except parts of the south) and Denmark suggests that it is the more tender, and W. J. Bean states so in his admirable "Trees and Shrubs." At the same time, it occupies on the hills a well marked zone above that tenanted by *U. europæus*. The severe winter of 1916-17, which decimated the bird population about Dublin and killed most of the foxgloves, played havoc with *U. europæus*. In Wicklow about half of it was killed to the ground; but *U. Gallii* was no worse hit, and, indeed, so far as my observations went, it came through better than its ally. The testimony on this question of other observers would be welcome.

It is just as well for the gorse, and all the worse for the farmers, that its spines are so efficient a defence against grazing animals, for when these are rendered impotent it is readily eaten, and makes an excellent and probably nutritive fodder. In some parts of England rough mills for bruising gorse are (or were) used. In the North of Ireland one of the many duties of the farm labourer used to be "knockin' whins"; they were beaten with a large wooden mallet in a wooden trough, and were then given to cattle. Why should not var. *strictus* (to be referred to later), which is soft enough to be eaten without pounding, be used as a fodder? It grows quickly, and would rejoice on ground too poor and thin for any other crop.

The leaves of the gorse are interesting both on account of their curious modification and because they do not seem to have made up their mind whether to take the form of a simple leaf (as in a few species of *Cytisus*, a close ally) or whether to retain the trifoliate leaf which is characteristic of so many of their relations, and which is presumably the ancestral form.



GORSE LOOKS ITS BEST IN THOROUGHLY ROUGH AND NATURAL SURROUNDINGS.

This point is best studied in seedlings, for the young gorse begins its career with a number of small but well developed simple or compound leaves, before these become reduced to the mere spines or tiny scales which characterise the adult. *U. europæus* usually bears several pairs of trifoliate leaves following the cotyledons, then a few flat simple leaves, and then the characteristic round spine-leaves. *U. Gallii* has usually one pair of compound leaves, followed by several pairs of flat simple leaves. But in both species the leaves of the young plant may be all simple or all compound, or simple and compound may be mixed irregularly. One is justified in assuming that these plants are losing their primitive (trifoliate) type of foliage, and adopting instead small hairy lanceolate leaves like those of *Genista sagittalis*.

It is difficult in the garden to get any of the gorses to look really happy, for they are accustomed to thoroughly rough conditions—sun, exposure and a poor soil. In cultivation they soon get leggy, and end by looking like scarecrows and dying untimely. It is necessary to give them the poorest, driest, windiest place that one can find. Their garden value, indeed, consists largely in their capacity for furnishing unpromising ground of this kind, where few things would flourish. Much the best plant for the purpose is *U. europæus flore pleno*, the double gorse, which makes a beautiful display in spring if only it can be kept compact. An interesting though not showy plant is the *Ulex strictus* of Mackay, which also belongs to *U. europæus*. It is a "juvenile form," a variety which, like Peter Pan, has never grown up. It has an erect habit, the prickles are very short and so soft that one can grasp a branch in the hand. It flowers very sparingly at the tips of the branches, and is reported to revert—at least in part—to typical *europæus* if sown; but I do not know whether this statement has been made with reference to the results of self-pollination, or whether there may have been a crossing with ordinary *europæus*. The specimens seen in British gardens are presumably all derived from cuttings of the single plant which was found at Mountstewart in County Down about 1820 by a local nurseryman, Mr. Murray, from whom John White, the author of "The Grasses of Ireland," obtained it and brought it to Dublin, where J. T. Mackay saw it and described it (though very inadequately).



# HERBACEOUS PHLOXES

OF ALL OUR BORDER FLOWERS THERE IS NONE WHICH PRESENTS US WITH SUCH A WEALTH AND VARIETY OF COLOUR AS THE PHLOX.

**W**ITHIN the last twenty years great progress has been made with herbaceous phloxes. Whereas the herbaceous phloxes of our boyhood were ungracefully tall, poorly coloured, had thin spikes and small flowers, the modern varieties are of stout, mostly dwarf stature, brightly and most differently coloured and have individual flowers as much as zins. across, grouped on large, stately, pyramidal trusses.

The chief raisers to whom we are indebted for these changes are Lemoine of Nancy, France, who has been working on phloxes ever since 1859, when the first novelties of the firm were sent out, also Pfitzer, Goos und Koenemann, in Germany, Ruys in Holland, and, in England, several specialists too well known to need mention here.

The herbaceous phlox has now become a first-rate border plant, owing to these improvements and to the fact that different ways of cultivation enable one to have it in flower all the summer through, from July onwards till September and October. Its range of colour is truly marvellous, extending from salmon and red to white, blue and violet, all exceedingly brilliant shades, linked up by all possible intermediaries — except that yellow does not exist. Easy culture and great facility of propagation also contribute to its great popularity. As a cut flower, although little has been said so far on the subject, it is also much to be recommended, not perhaps for the trade, but for private houses where the stems can be cut when required and put straight into water. It then keeps bright for several days and exhales a very sweet and gently penetrating perfume, most pleasant in the house.

Few other hardy plants, with as little care and trouble, succeed so well in the border or are so exceedingly brilliant as the phlox. With it, cultivation is reduced to the strictest minimum; every year, a simple liberal dressing of some light and highly fertilising material should be given in the spring at the time when the usual forking of the upper soil is done. No staking or very little, is required. The plant ranks also among the truest of perennials and is sure to come up year after year. A point on which it is nevertheless useful to lay stress is always to give the herbaceous phlox a rich, porous and warm ground and as open a situation as possible. In poor soils and too shaded places it gives thin spikes and small flowers and is rather susceptible to summer drought. A good way to maintain strong and healthy plantations is to establish young propagations as often as possible, and never twice on the same spot, or at least after a long interval. This is the secret of many successful growers. The plant being a gross feeder can thus grow vigorously and so resist the diseases which sometimes affect old and poorly grown plantations. In the herbaceous border, this desirable continuous shifting and propagation is not possible, but very liberal annual dressings act to a large extent in the same way. At all times and under all conditions, the plant benefits greatly from frequent stirring of the surface soil with the Dutch hoe or some other such implement, a practice which, by the way, saves much labour in

watering during the hot season; as, indeed, it will do in the case of every plant.

The herbaceous phloxes present a great diversity as regards their heights. Some varieties, like Josephine Gerbeaux, will attain a height of 5ft., and some others, such as Tapis Blanc, rarely exceed 1ft. or 1ft. 6ins. The more useful for the border are probably those of about 3ft.—particularly as it is mainly in that height that the finest varieties are to be found. A good plan in establishing borders is to take advantage of this difference of heights by having phlox disseminated throughout the whole of the beds, in front, in the middle and

at the back. As regards colour, a certain number of varieties, mainly in the scarlet and fiery shades, are sometimes somewhat spoiled by the sun. In that case, it is best to plant in partial shade; which is an easy matter, as phloxes look particularly well when forming a foreground in front of shrubs, walls, tall herbaceous plants, or under thin trees, etc. In all cases, only one variety must be planted at a time, since a mixture of varieties never gives the same brilliant display as distinct, showy patches of one colour.

To give a selection in the numerous varieties of phloxes now in existence is not an easy matter, but here are a few:

ÆGIR.—A fiery red, fine colouring, unaffected by sun.

ANTONIN MERCE.—Dark lilac with white centre: large flowers, very free and distinct.

BARON VAN DEDEM.—A beautiful shade, orange scarlet, large pips. Has superseded the older Coquelicot.

ELIZABETH CAMPBELL.—Delightful light salmon, changing to pink, large flower. Ought to be in every collection.

EUROPE.—Snow white flowers of fine substance, with central rosy ring. Large compact trusses.

EVANGELINE.—Very rich salmon pink. A showy plant.

FRAU ANTON BUCHNER.—Probably the finest white in existence. Large trusses and flowers. Habit stiff and dwarf.

GENERAL VAN HEUTSZ.—A dazzling shade of salmon red with distinct white zone at the centre. A most effective variety.

G. A. STROHLEIN.—Loose branching trusses. Orange-scarlet with bright carmine eye. A nice shade.

HOMELAND.—A comparatively new variety with large trusses of brilliant orange, and pips distinctly red.

LE MAHDI.—One of the best of Lemoine's varieties and of magnificent colouring. Rich violet blue. A first-rate plant.

MARECHAL FOCH.—Probably the best crimson in existence. Large flowers. Eye darker.

MARIE JACOB.—Very large truss, pale lilac with white eye. Pretty and distinct.

MIA RUYS.—A beautiful white, dwarf, very large pips.

MRS. MILLY VON HOBOKEN.—Enormous trusses of salmon pink colouring. Fine plant.

MONS. KIND.—Bright orange-red, shaded copper. Good habit.

MRS. SCHOLTEN.—Large pyramidal trusses. Fine dark salmon pink.



HERBACEOUS PHLOXES ARE ALWAYS USEFUL IN THE BORDER.



NEWMIRD.—Pleasing variety of recent years. Rich amaranth crimson. Large pips and spikes.

NICHOLAS FLAMEL.—Brilliant scarlet red with purple eye. Very large pips.

PANTHEON.—A comparatively old variety still popular through its beautiful and distinct rosy salmon colouring and good habit.

RIVERTON JEWEL.—Well shaped trusses of large flowers, mauve pink with brilliant carmine eye.

RYNSTROON.—One of the most beautiful phloxes. Enormous trusses on rather dwarf stems. Lovely soft rose colouring.

SEGRID ARNOLDSON.—A fine deep crimson of bold aspect and good constitution.

SELMA.—Of Dutch origin. One of the best of its colouring. Lovely bright pink with bright cherry red centre. A good doer.

THOR.—Rich salmon, suffused white and carmine eye.

Phloxes sometimes suffer from a pest, common among daffodils and other bulbs, called "eelworm" or "*Tylenchus devastatrix*." It is a small nematode about one-sixteenth of an inch long that attacks the plant on ground level and rapidly kills the upper part of it. The only remedy known is to cut the stems as soon as they show signs of ill health just below the ground level and to burn them at once, or better still to burn the whole of the plant. Phloxes are also attacked by a bacterial disease caused by the "*Bacillus caulivorus*," which affects the plant at the base of the stems and soon kills it. Plants that have been frequently transplanted and propagated, and given rich soils, are far less susceptible to these diseases and pests. In early spring the leaves of the phlox are often attacked by a fungus which gives the leaves a very crumpled appearance, but this can to a certain extent be kept in hand by the use of an appropriate fungicide.

C. L.

## SOIL ACIDITY AND PLANT GROWTH

BY T. EDEN (*Rothamsted Experimental Station*).

THE responsiveness of plant life to differences in the nutrient properties of the soil is everywhere manifested, and the importance of ensuring that sufficient of the various plant foods are present in the ground is realised; the highly important process of manuring is the natural consequence of such knowledge. It is not, however, so widely recognised what an influence "soil reaction"—and by that is meant the degree of acidity or alkalinity of the soil—has on the vigour, fruitfulness, and even the distribution of plant life.

Soil acidity or sourness is always associated with deficiency in lime, and in England at any rate the converse is usually true, that soil alkalinity is due to excess of lime or chalk, unless the soil reaction has been made alkaline artificially by the use of alkaline fertilisers. In America and Egypt there are vast tracts of land where excess of common salt has led eventually to a state of pronounced soil alkalinity. So far as this country is concerned soil acidity is liable to develop on all types of land where lime or chalk is deficient, though the presence of other basic mineral substances may to some extent remedy this defect. Water-logged soils rich in humus material under conditions of bad aeration and scanty lime and mineral content produce the so-called humic acids, and are characteristically acid. No other soils attain to such a high degree of acidity under normal conditions; moorland soil is a typical example of this class. Where lime is available, soils of a similar nature, water-logged to the same degree, have their acidity neutralised, and owing to this and other changes consequent on their non-acidity, become productive fen soils. At the other extreme of soil moisture and humus content are the light sandy soils, which rapidly turn acid through sheer exhaustion of their lime supply by leaching out, *i.e.*, loss by drainage of substances dissolving out of the soil by the moisture it contains. It is estimated that under varying conditions of soil and rainfall from three hundredweights to half a ton of lime per annum is lost from an acre of cultivated land. Between the light sand and the peat there lie soils of varying mineral, lime, humus content and leaching propensity in which the phenomenon of acidity is present to a corresponding degree. There is, in the face of such conditions as those just described, little wonder that large areas of land untouched agriculturally or horticulturally are in a very acid state, and that to the farmer and the gardener the problem of counteracting the ever-increasing tendency to acidity is of the utmost importance.

The existence of soil acidity can often be surmised from the presence of specific weeds

and natural herbage; more will be said on this point later. A chemical test is the surest means of settling the question, and a very simple and effective one is described by Professor Comber. In a test tube or small bottle place about a teaspoonful of dry soil and add a solution made by dissolving a few crystals of potassium sulphocyanide in alcohol. (This should be procurable at any good pharmacy.) The test is dependent on a colour change, so that methylated spirit is not satisfactory. When the soil is well covered, shake thoroughly and allow to stand until all turbidity has disappeared. The solution will remain colourless or only slightly tinged with brown if the soil is not acid, while a deep red colour of varying intensity will denote corresponding degrees of acidity.

The effect of soil acidity on the plant is best demonstrated on such highly acid soils as moors and heaths where no attempt has been made to preserve a balance of lime in the soil. Broadly speaking, plants fall into three groups with regard to their behaviour to conditions of soil reaction. These are:

(1) Plants which will tolerate only a small range in soil reaction and which flourish best in a neutral or slightly alkaline soil.

(2) Plants which in a similar fashion tolerate only a small range of soil reaction and whose optimum growth conditions lie in the region of slight acidity.

(3) Plants which will tolerate a relatively big range of soil reaction but which undoubtedly do best in well conditioned soil.

The first group contains many of the cultivated grasses, grain crops and leguminous plants, particularly lucerne and sainfoin. If the limit of soil acidity which these can endure is passed they fail. Clover in an acid field will be patchy and timothy grass grown with other species in a meadow will succumb to the competition for the necessities of life which takes place between it and hardier species.

The second group is small and specialised, and the heath family are among the most important members.

The last group comes between the other two in the matter of numbers, and in it are found those plants, like sheep's sorrel and spurrey, which are looked upon as indicator plants for soil acidity. As has been mentioned, by themselves they would thrive in a sweet soil, but they can more than hold their own against the less tolerant species in conditions of acidity. Finally, they cover a large portion of the ground and become the dominant species, though under conditions more favourable to their competitors they would themselves suffer almost complete

extinction. Because of this competition and difference in tolerance, soils of different types with regard to acidity develop different types of flora if untouched by man. A few examples may be of interest. Marshy land where acidity is not prevalent will grow the giant reed, the bog myrtle and the bog bean, while in just the opposite circumstances one may expect the sphagnum moss, cotton grass and cranberry. A typical limestone woodland will generally contain a considerable number of ash trees; its grasses will be broad-leaved, its damp places sprinkled with forget-me-nots; while on its edge a number of the wild orchids may grow. A wood on an acid soil will have oak and birch overhead, hair-grass and sheep's fescue under foot, many kinds of sedges and rushes in damp hollows and on its outskirts a heather colony.

The soil of the garden, however, is seldom so extreme in the matter of acidity or alkalinity as virgin land, nor does the competitive factor enter to any great extent except in lawns. Nevertheless, the effects of varying soil reaction may be clearly traced in a number of instances. The following examples are chosen so as to illustrate the several ways in which the acidity or alkalinity may affect the plant. Changes in reaction may upset the balance of the different food constituents in the soil nutrient solution, with bad effects on the health of the plant. Roots, too, are liable to injury by extreme conditions. It is in these two ways that, very probably, the majority of plants are influenced. But, as with wild plants, garden plants vary in their tolerance, so that while strawberries and bilberries thrive on acid soils, and deciduous fruit trees prefer slightly acid conditions, the gooseberry is easily injured by such treatment. The chestnut, azalea and blackberry, according to experiments conducted in America, are actually injured by liming.

A second way in which soil reaction may affect the plant is by cutting off from it entirely some necessary element of plant food. Two cases of this phenomenon have recently been mentioned in the correspondence columns of THE GARDEN under the head of change of colour in hydrangeas and chlorosis of fruit trees (February 7th, 1925). As explained, these effects are due to lack of iron, which is made non-available to the plant in the presence of excess of lime. To what has already been said two details may be added. The first is that the change from blue to pink flowers in hydrangeas commences while the soil reaction is still slightly acid; and, secondly, the effect produced by chalk which was quoted as safe, and that produced by lime which was cited as unsafe, is



really only a question of degree. The former is much less effective than the latter in making the soil alkaline, so that while chalk will only in most cases alter the soil reaction sufficiently to cause depletion of iron to that degree which promotes change in colour, lime may push the reaction farther and cut it off altogether, bringing about severe chlorosis and death.

It is well known that certain families of plants have micro-organisms living in their root cells, and that each makes an important contribution to the means of livelihood of the other. It is of the essence of this phenomenon of symbiosis (=living together) that the good of the one is the good of the other. Consequently, another method by which soil reaction may affect a species is by rendering the co-partnership impossible. Already it has been pointed out that it is sometimes soil acidity and at other times alkalinity which produces harmful effects, and in symbiosis the same variety of behaviour is encountered. The roots of leguminous plants have small nodules on them containing bacteria which actively extract nitrogen from the air in the soil and lock it up in the cell tissue. These bacteria as a general rule require a non-acid soil. A comparison of the roots of beans or peas grown under well limed and poorly limed conditions will immediately show the harmful effect of the latter on the number and size of these nodules. A classical example of this preference for well limed soil occurs on the park

grass plots at Rothamsted. Many of these plots have received the same manurial treatment year after year since 1856, and some, in consequence of the continuous use of sulphate of ammonia in abnormal doses, have been made very acid by leaching out of lime; from these plots legumes have disappeared entirely. In this connection it may be mentioned that the other largely used nitrogenous fertiliser, nitrate of soda, has the reverse effect on soil reaction. Ericaceous plants, like the rhododendron, also have a micro-organism, the fungus mycorrhiza, in their roots, but in order that this may survive, a slightly acid reaction is necessary. The work of Dr. Rayner on the common heather has made it clear that the fungus cannot live in the roots if lime is present in the soil. In such cases the heather never becomes a mature plant. It is highly probable that this, too, is a case of preferential soil reaction. Heather is always associated with acid soils, and when, as in certain parts of Derbyshire, it is found on limestone, further investigation invariably shows that thorough leaching has exhausted the surface soil of lime. The rhododendron is a parallel example, and the use of peat, with its acid properties, for bedding round the roots has therefore sound justification.

There remains one very important way in which soil reaction can influence the plant, that of changing its susceptibility to parasitic disease. Anything which lowers the vitality of the plant will aid parasitic attack, especially

from fungi, and in some cases soil reaction will directly affect the fungus. The most striking example is afforded by finger-and-toe disease in turnips and club root of cabbages. This disease is definitely associated with soil acidity, and if the land affected is limed and cropped with some non-cruciferous crop for a year or two the fungus will be unable to withstand the change and will be stamped out. The other side of the picture is furnished by the potato, which in some soils is subject to a fungus attack causing common potato scab. Of a number of cases brought to the notice of Rothamsted during the past two years most could be directly traced to excessive use of lime. In this instance the potato can withstand without injury a degree of acidity which is fatal to the parasite. In America the use of sulphur to render the soil more acid has met with remarkable experimental success on the very few types of soil that have been tried.

It will be evident from these remarks that generalisation with regard to soil acidity is difficult, but in the long run acute acidity will kill practically any plant. There is, too, a real danger of the wastefulness of acid soils being overlooked in gardening. Where something is known of the preference of the crop in question, allowance should be made in the matter of rotation and liming. In any case of doubt a simple trial with lime and without will give the observant gardener the information he seeks.

## TUBEROUS BEGONIAS FOR BEDDING PURPOSES

BEGONIAS FORM ONE OF THE MOST ORNAMENTAL GROUPS IN OUR LIST OF CULTIVATED PLANTS. WITH THE ARRIVAL OF NEW SPECIES AND THE BIRTH OF NUMEROUS VARIETIES AND FORMS, THEY PRESENT A WIDE CHOICE TO THE CULTIVATOR. SOME MAY BE GROWN PRIMARILY FOR THEIR FOLIAGE, OTHERS FOR THEIR SHOWY BLOOMS. MANY PROVE EXCELLENT SUBJECTS FOR THE CONSERVATORY AND GREENHOUSE, WHILE OTHERS, AGAIN, ARE MORE SUITABLE AS BEDDING PLANTS.

**B**EAGONIAS in all shades of yellow, apricot, orange, pink and crimson, either blended together or massed in one colour, form one of the most beautiful and effective of all bedding plants. Both tuberous and fibrous-rooted begonias are used for bedding purposes, but the former are more popular. Tuberous begonias are exceedingly showy bedding plants, are easily raised, can be obtained in a wide range of colour, and flower for a considerable period. They are particularly useful in that, even in a wet summer, they flourish and bloom well.

During the month of March tuberous begonias should be started if the best results are to be obtained. Where a greenhouse is not available, a hot-bed will answer the purpose in a satisfactory manner. Use shallow boxes filled with leaf-mould or a rich, light soil, and press the tubers lightly into the soil—they should not be covered. There will be an interval after the tubers are placed in the boxes before they start to grow, and during this interval very little water need be given so long as they are kept moist. When the shoots have reached a height of about  $\frac{1}{2}$  in., gradual hardening off should be commenced. A cold frame is best for this purpose, but if there is danger of frosts the plants require to be protected by covering the frames at night with mats.

Early in June the plants will be ready to go out of doors, and should be planted in their permanent positions, between 6 ins. and 12 ins. apart, the distance depending upon the size of the plants.

It is unnecessary to plant in a sunny position, as begonias thrive very well although in partial shade. Until autumn frosts begin they will continue in flower, showing their first blooms as early as the middle of July. They need a great deal of moisture during the flowering period.

After they have lost their beauty they should be taken up carefully and dried. They may be safely kept through the winter if they are stored in boxes of dried soil in a frost-proof shed until the following spring.

The soil in the boxes in which the tubers are stored should be kept dry, but not bone dry, or the tubers may begin to decay. A little water given very occasionally will prevent this, but it is easier to overdo the watering when the tubers are at rest than to give too little. Exercise the greatest care therefore when giving water at this period.

Although they may be successfully grown from seeds, the seedlings have little value as bedding plants during the first season, but on the other hand the colours are often exceptionally good.

Both single and double flowered varieties are available, and both are attractive, with their gay colouring; but the single ones are to be preferred for use in beds. The reason for this is that the double varieties expand less freely.

There is a fairly simple method of propagating begonias which was largely favoured when named varieties were more popular. As this method is useful for increasing plants of any particular type and colouring, it is worth describing. Half bury the tubers in sandy soil in a box which should be placed in a warm house. When the eyes push out from the crown, lift the tubers and remove all soil. These tubers should then be cut through cleanly, and, in order to give the cut pieces a better chance, take care that there are two eyes on each piece of corm. Only large bulbs which throw up three or four shoots can be safely treated in this manner. If cutting is carefully done the plants will continue to grow on without a check. They must, however be placed in a warm house for some time after dividing.

To be successful with begonias they must be given thoroughly good treatment, but the results then obtained amply repay the labour expended.

Among tuberous-rooted varieties may be mentioned Snowdrift, which has double white flowers; General Allenby, with its crimson scarlet double flowers; Mrs. W. Cuthbertson, the flowers of which are frilled and are lilac-rose in colour, these are also double; and Queen of the Belgians with its large double flowers of cerise-pink colouring. J. W. MORTON.



# CONSERVATORY AND GREENHOUSE

**ACHIMENES** in many beautiful varieties are very useful for greenhouse decoration during the summer and autumn months, and it is surprising that they are not more generally used for this purpose. They can be raised from seed, which should be sown during February in pots or pans of light sandy soil, placing the seed-pans in a warm moist house with a temperature of 60° to 65° Fahr. The young seedlings should be pricked off into well drained pans of light rich soil; they should be kept shaded from too bright sunshine, and when they are about 2 ins. in height may be placed several inches apart in their flowering pots or pans. As they are shallow-rooting plants, pans are well suited for their successful cultivation. Excellent examples can also be grown in 5 in. pots. They should be grown on without any check in a temperature of about 60° until they are nearly in flower, when they should be accustomed to cooler conditions before they are removed to the greenhouse. If well grown they should flower towards the end of summer. The named varieties are grown from rhizomes which have been stored in dry sand over the winter. They should be started some time during February by laying out to start in leaf-soil and sand in shallow seed boxes, in a temperature of 60° to 65° Fahr., taking care not to over-water them until they have made some growth; When this is some 2 ins. in length they should be placed in their flowering pots or pans, spacing them out from 3 ins. to 5 ins. apart, the greater distance for the stronger-growing varieties, such as *A. longiflora* and its varieties. Their subsequent cultivation is on the same lines as that advised for the seedlings. Free drainage and a light rich compost are essential for success. *Achimenes*, especially the more slender-growing varieties, are excellent for filling hanging baskets; indeed, *A. coccinea* always does better in baskets than pots. They are very subject to attacks of white fly and begonia mite; the former must be kept in check by fumigating with hydrocyanic acid gas or some other approved remedy; the begonia mite can be prevented by the occasional use of the sulphur vaporiser.

**CLIANTHUS DAMPIERI** (Glory Pea of Australia).—This plant has always, and not without reason, been regarded as difficult to cultivate successfully. Plants raised from seed and grown on their own roots are very uncertain, but by grafting them on seedling stocks of *Colutea arborescens* (bladder senna) one has a much better chance of growing this plant successfully. As grafting is done when both plants are in the seedling stage, it is a very delicate operation and requires considerable skill on the part of the cultivator. The seeds of the *colutea* should be sown about ten days before the *clianthus*, placing them in a warm house with a temperature of about 60° Fahr., the *clianthus* being sown in the same temperature. When fit to handle the *coluteas* should be pricked off singly into thumb pots, taking care to leave the swollen hypocotyl above the soil. The operation consists in cutting out the leading growth or young stem from between the leaves of cotyledons; the swollen portion should then be split downwards with a sharp razor, the tiny seedling *clianthus* should then be cut off and trimmed to a wedge shape and inserted in the slit made in the stock, afterwards binding it together with a piece of soft bass or thread. If the worked plants are placed in a close warm case they should quickly unite, when they should be removed from the case and stood on the stage well up to the roof glass, keeping them shaded for a few days.

As they require it they should be potted on into well drained pots, taking care to

disturb the roots as little as possible. As they increase in size they should be gradually accustomed to an ordinary greenhouse temperature. They may be grown on into 8 in. or 9 in. pots, training the shoots up to wires, and are also excellent for filling large hanging baskets. The writer has obtained excellent results by planting them out on a well drained and raised bed in a greenhouse. This plant is very subject to attacks of red spider; this must be carefully guarded against, as, once affected, it is very difficult to get rid of them, as the leaves are closely covered with fine silky hairs, which give the whole plant a silvery grey appearance.

**CLIANTHUS PUNICEUS**, which is a native of New Zealand, is a very different looking plant from *C. Dampieri*, and, unlike that plant, its successful cultivation presents no difficulty. In the west it grows freely and makes a large plant outdoors against a warm wall. It is easily raised from seed or

germinate. The young plants should be grown on in pots until they are about a foot high, when they may be planted out in their flowering positions. They grow quite well in any good potting compost, and are at their best the second and third year from seed sowing.

**LATHYRUS SPLENDENS** is a native of California, and is a very beautiful plant with dark red flowers. In the west it succeeds outdoors when planted against a warm wall; in other parts of the country it requires the shelter of a cool greenhouse. This fine plant is best raised from seed, but can also be propagated by means of cuttings, which root in a close case in a cool house. The seeds germinate readily in slight heat, and, like *L. pubescens*, the young plants should be grown on in pots until they are large enough to plant out in their flowering quarters. I have found it succeed best planted out on a raised bed and the slender shoots trained



A FINE SPRAY OF CLIANTHUS PUNICEUS FROM NEW ZEALAND.

cuttings, the latter rooting readily in a close case with slight bottom heat. Good specimens may be grown in 8 in. or 10 in. pots, but this plant is only seen at its best when it can be planted out in a cool house and trained up a back wall or pillar. This species is liable to attacks of red spider, but they should be easily prevented by a vigorous use of the syringe.

**LATHYRUS PUBESCENS**.—This beautiful climbing plant is a native of Chili and is an ideal plant for the cool greenhouse. In the south and west it is hardy when planted against a warm wall. It is surprising that this beautiful plant is not more generally grown, as its successful cultivation presents no difficulty, and its sweet-scented, dark lavender-blue flowers are very attractive and are useful for a supply of cut flowers. To have it at its best it should be planted out in a well drained bed or border, and the shoots trained up a back wall, or to wires under the roof glass; a light position is essential, and the writer has grown it well planted out on a raised bed in a carnation house. The seed should be sown in a temperature of 50° to 60° Fahr., in which they quickly

to wires under the roof glass; or it may be planted at the foot of—and trained up—a sunny back wall; in the latter position it is seen to better advantage. This plant is by no means so easy to do well as *L. pubescens*, and at present is scarce in cultivation; this is unfortunate, as it should be easy to procure seeds from its native country.

**CAMELLIAS**, at one time great favourites, have been out of favour for many years, and yet there are few more handsome plants for planting out in a large conservatory, and they have the advantage of being perfectly hardy in an unheated house. In recent years there has been a brisk demand for them, especially for the single forms, of which there are now many beautiful varieties, such as *C. magnolæfolia* Lady Clare, Kimberley, White Swan and *C. japonica grandiflora* (Mrs. Sander), to mention only a few. *C. rosæflora* is very charming, with small double rose coloured flowers and, of course, the best of them all, where room can be found for it, is *C. reticulata*, with its large semi-double rose-red flowers.

J. C.



# SIMPLE GARDENING

FIGS.

**A**N old fig tree in an old garden seems to be quite a part of it. Some old specimens bear well, others do not. I have grown, with equal success, trees over one hundred years old and quite young specimens because I was able to apply the right treatment. In the southern counties the trees, on good walls, rarely require any protection in the winter. In the northern counties it is advisable. Old specimens not fruiting satisfactorily may be overcrowded with long-jointed, unripe branches every year, or the roots may be rambling in a rich soil intended for vegetables near by. The inexperienced cultivator, wishing to grow figs outside, should select the variety Brown Turkey, because it is hardy, fruitful and of high quality. The next consideration should be the site for the tree. Of course, a high wall facing south is the best one. One sees old specimens with their branches trained on walls facing south and west respectively, the tree being planted in the angle of the walls. The rooting space must be restricted. Six feet by 3ft. 6ins. and 30ins. deep will answer as a border for a tree for many years. The drainage should be good, the turfy loam too; manure is not required, but some old mortar rubble is. The new bed must be made very firm while the soil is rather dry. Then ordinary watering and a surface dressing will do for the summer treatment for the roots. The branches should be trained 18ins. apart, very sappy bits should be pinched out altogether, also the ends off the shoots when the latter bear five or six new leaves and embryo fruits. Do not cut fig branches.

## FIBROUS ROOTED BEGONIAS FOR THE GREENHOUSE.

In recent years the fibrous-rooted begonias have been much improved; the strains sent out by our nursery and seed firms being pure and reliable. Those persons who are not able to procure, or grow, the tuberous begonias or who prefer the fibrous ones, should not hesitate to grow a number of plants in pots. It is rather late in the season now to sow seeds, so the best plan is to make a selection of the tiny seedlings already in the pans, perhaps, for bedding out purposes, and, in due course, pot them separately. There are several fine colours on the market, I name three only: Fairy Queen, in pink and white respectively, and Coral Pink. There are crimson shades, but these are not as attractive in a greenhouse as the pinks, and a good white enhances their beauty besides being most useful for staging between pinks and other colours in the greenhouse that would not harmonise. Not only during the summer, but the early autumn months, too, good strains of the fibrous-rooted begonias continue to flower. Where the turfy loam is of a heavy nature a greater proportion of rotted leaf soil should be used in the compost. In the case of sandy loams less leaf-soil should be mixed with it. Re-pot the tiny plants as they need

more rooting space, till they occupy 5in. and 6in. pots. These are quite large enough. Give the plants frame treatment during the month of June, then transfer them to the greenhouse. Do not use strong manures at any stage. Stimulants should be given in weak doses and seldom. Stopping is not necessary.

## PLANT-GROWING ON OLD WALLS.

The accompanying sketches show how rock plants are grown on an old wall in a Hampshire garden. It is now nearly forty years since I first saw this particular wall; the plants had, then, been recently planted. I saw the wall a few months ago and many of the original plants, some of the latter being more than 2ft. across. The flowering subjects blossom splendidly. The sketches show how the wall is prepared for the plants; the wall itself is partly under the spreading



branches of large woodland trees. The letter *a* shows end of wall, *b* the approximate space to contain compost and roots of plants. At intervals of a few feet the top courses of brick are tied by cross bricks. The front of the wall is shown at *c*, and the woodland trees at *d*, on the south-west side of the wall. Old walls, treated in this way, are charming. When the compost is first placed on the wall care should be taken to firm it thoroughly and to select for the purpose tough, fibrous turf. A few half-rotted leaves are better than peat for adding to the loam as peat does not readily absorb water after it becomes dust dry. Any old favourite plant may be included, but for the benefit of the inexperienced a beginning with the following kinds will answer the purpose. *Alyssum saxatile*, *Achillea rupestris*, *Arabis albida*, *Arenaria*

*montana*, *Aubrietia excelsa*, *Campanula garganica*, *Dianthus fragrans*, *Gypsophila repens*, *Hypericum polyphyllum*, *Linum flavum*, *Nepeta Mussini*, *Oenothera mexicana*, *Phlox stellaria*, *Saxifraga apiculata*, sedums and thymes in variety.

## THE CARE OF SUMMER BEDDING-OUT PLANTS.

Where glass accommodation is very limited and a rather big stock of bedding-out plants is required, much skill is required in dealing with the plants at this season so that they will be nice, sturdy specimens when the time comes to plant them in the garden. Three good plants are more valuable than five poor ones, so it is wiser to grow a limited number and grow them well, than a surplus which would result in weakly plants. In many small gardens the wise cultivator will make use of a few empty boxes, such as orange boxes, knock out the bottoms and place them on a bed of ashes, or retain the bottoms and place a layer of ashes in each one. It is a very easy matter to cover the boxes at night with sacks, scrim or mats. The full exposure of tender plants, after careful treatment under glass, generally results in a serious check, whereas the boxes will prevent such checks. Cuttings, recently rooted, should be re-potted and retained under glass till they possess a number of roots touching the sides of the pots before they are transferred to outside boxes or cold frames. Very careful watering is necessary and all water used should be placed in a frame, a greenhouse or a sunny corner outside for several hours before it is applied to the plants. Some rotted leaf-soil is very beneficial in the case of tender seedlings and newly-rooted cuttings.

## THE TREATMENT OF AZALEAS AFTER FLOWERING.

Many plants are spoiled every year because they are not properly treated after the flowers have faded. While the flowers remain fresh water is applied, mostly, when it is needed, but afterwards the plants are frequently neglected in this respect; they are also allowed to suffer through being infested by red spider and thrips, the two principal insect enemies of these plants. Even while the flowers are fresh the new shoots are growing and, later on, they mature and bear flower buds in numerous cases. If any plants need re-potting, this work should be done at once. Very fibrous loam and peat in equal proportions with a free addition of coarse sand form a suitable compost. The old ball of soil must be thoroughly moistened through before re-potting is done and the new compost must be made firm. Good drainage is essential. Manures are not required. Careful watering and daily syringings will ensure clean, healthy growth. Early in June the plants should be placed outside on slates or ashes in a cool position shaded from the noon sun and facing north. By September the new shoots will be ripe and flower buds formed. I refer to Indian azaleas mainly. GEORGE GARNER.



## CORRESPONDENCE

## MODERN LUPINS.

SIR,—Since publication of the article under the above title, which appeared in *THE GARDEN*, February 21st, I am reminded by a peep into Kelway's "Manual of Horticulture" (1901 edition) that so far back as the year 1898 Lupin Somerset was exhibited by Messrs. Kelway and Son and received an award of merit from the Royal Horticultural Society. This was the first recognised hybrid between *Lupinus polyphyllus* and *L. arboreus*, and the first herbaceous lupin of a clear yellow colour. In all fairness, Messrs. Kelway's part as pioneers in the production of the modern race of lupins should have been referred to in my article, and I crave leave to rectify an omission for which there can be no justification. Somerset, as I can very well remember, was received with open-armed welcome, and many were the speculations as to the possibilities which this new "break" opened up. During the dozen years or so immediately following the advent of Somerset, Messrs. Kelway and Son worked in their characteristic manner which has made them so conspicuously successful with many popular families, and in the case of the lupin resulted in the production of a fine series of the hybrids, ten of which are described in the Manual of 1913. Canary, as might be anticipated, is clear yellow, but Belle of Huish, Coronation and Phyllis Kelway all gave us a foretaste of the fine blendings of coppery, bronzy and orange tints with lighter yellow which have of more recent years made the modern lupin the highly favoured flower it undoubtedly is. Others of this set are Huish Beauty (purple with a touch of yellow on the standard petals) Langport King (a variety which varied in tint from base to tip of spike, embracing blue, carmine and some white). Porcelain Blue has flowers of the shade indicated by its name with some white in the standard petals. Punchinello is mauve and yellow, and Rod of Ivory is ivory white and creamy yellow. These, or most of them, have the evidence of their hybrid blood plainly imprinted upon them, and some hanker after the arboreus habit.—L. I. ATRIS.

## DIGGING AND TRENCHING.

SIR,—The letter from "J. H." (page 107), is interesting, but the suggestion it contains most decidedly does not agree with my experience of well over forty years duration, on ground that is practically all that heavy, poor, tenacious stuff termed "London Clay." If "J. H." can find a much worse medium on which to grow vegetables in the way of soil, well, I should rather like to see it. Yet! This is the ground that has borne the vegetables of the grower to whom he refers. When I first came to Aldenham those many years ago I was informed that the old kitchen garden was "worked out," and it was a poor bit of ground, with but a few inches of impoverished soil on the surface, and this had been scratched over for something over 100 years. I was not satisfied with this statement, and immediately trenched right into it to bring the deep subsoil (clay) to the surface, a practice I have always advocated, and that kitchen garden has been the prime area for the production of the Aldenham exhibition vegetables! I came to the conclusion years ago that the more "poverty struck" the soil, the more need there was for deep trenching and the inversion of the lower spits to the surface, where sun, air, rain, snow, frost, etc., could all play their part in rendering it properly fertile, over and above the fact that such method permitted the working in at the deeper levels of material that would help to lighten the mass, and feed the plants, as well as

providing the deep root run so necessary for the proper growth of vegetables in the majority of cases. We have always adopted this principle at Aldenham, and I cannot, in face of actual results, agree with the contention of your contributor, nor alter or modify my previous advice.

If "J. H." would like to see the soil and the area referred to, we should be pleased for him to see it, and the method applied, for, with the results attained, we can be proud of the method, for it has proved a surprise to many who have held similar views to those of "J. H."—E. BECKETT.

## PRUNUS PISSARDII.

SIR,—The illustration below of a spray of *Prunus Pissardii* shows, I think, the beauty of this species. The pinky white blossoms are especially beautiful and show up in contrast to the almost blackish bark of the twigs. The foliage is also of extreme value



PINKY WHITE BLOSSOMS OF P. PISSARDII.

in the shrubbery owing to its coppery purple tints, which almost rivals those of the copper beech.—A. J. PEARSON.

## OSMANTHUS DELAVAYI.

SIR,—Mr. Ballard does well to demur (page 133) to my suggestion of *Osmanthus Delavayi* as a hedge plant, which was not warranted by experience, for I have never seen that charming plant put to that purpose. Moreover, I have since been told that it is not easily propagated by cuttings, which would prove a difficulty in raising a sufficient stock. The fact is that, being disappointed in the meagre crop of berries borne by *Lonicera nitida*, its amethyst berries constituting in my judgment its only claim to be reckoned as an ornamental shrub, I made random mention of *O. Delavayi* as a substitute, it being in full flower at the time of writing. A feeble excuse, I own, but it must serve in default of a better.

If I had occasion or room to plant a garden hedge, it should be made of *Ribes sanguineum*, being led to that conclusion by the behaviour of a large bush in the grass plot before a farmhouse in this neighbourhood which has been a joy to behold for very many spring-times in succession. Standing about 7ft. high, it is closely clipped annually in the form of a dome, yet this treatment does not interfere with the profusion of crimson bloom which it bears year after year. Cuttings of the

flowering currant set in September or October strike without fail in the open. There is a wide range of colour in the varieties, from blood-red to nearly pure white, and the hybrid *R. Gordonianum* might be used to contribute a blend of soft orange.

In common with many other spring-flowering shrubs, *O. Delavayi* has responded to the abnormal warmth and wet of the past winter by starting its display a full fortnight earlier than hitherto recorded. It began here on March 5th. It appreciates a dressing of lime in the soil.—HERBERT MAXWELL, *Monreith*.

SUCCESS WITH GARDEN PEAS:  
AN APPRECIATION.

SIR,—I should like to thank Mr. Edwin Beckett for his very timely and interesting article on garden peas. Coming from the pen of one who is the foremost and most successful exhibitor of our time, it is well worthy of the close attention of those who grow this, one of the most useful of all vegetables. It is a fact, as the writer has stated, that one meets with two classes of growers—one who, no matter what improved sorts are introduced, will persist in sticking to the old sorts of peas, that were, undoubtedly, good thirty or forty years ago, but which have long since been outdistanced by immensely better varieties. Talk to these friends about the excellence of modern sorts, and you are immediately met with the rejoinder, "Ah, give me some of the good old sorts like American Wonder and Gladstone." They have nothing to say for the more valuable introductions of the time in which we live. I venture to say that many readers who have had practical experience of the Gladstone pea will be quite in accord with what Mr. Beckett says in regard to its being uncertain in its habits and poor in quality when compared with others of Duke of Albany type. I well remember Mr. Beckett's opinion of the Gladstone, and it is set forth in his book (page 180), "Vegetables and Their Cultivation," now before me. But I think last year, with its long spells of cold and wet, disillusioned many who grew the Gladstone. At any rate, some whom I know, who pinned their faith to it, especially for exhibition, are now looking to other varieties.

No one knows more of the immense value of trenching ground than Mr. Beckett. He practises at Aldenham what he has long since preached, and the success of his work has followed him to the exhibitions of the R.H.S., Shrewsbury, Southport and elsewhere, where those high-class vegetables, so superbly staged, were the admiration of thousands. In my experience of gardening and of shows, extending over very many years, no one, in my judgment, has done more to raise the tone of the vegetable section in the exhibition arena. As a friend of mine said in speaking of the Shrewsbury Show of 1924, at which Mr. Beckett eclipsed even himself, "Nothing but the best will do for Beckett."—W. LINDERS LEA.

## LACHENALIAS.

SIR,—May I be allowed to point out an error in the report of the R.H.S. Show of February 24th, as given in *THE GARDEN*? The title of the illustration "Lachenalia" is misleading and should read "Excelsior Seedlings," as there is a number of varieties in this strain. Also Nelsoni has been in commerce for many years and cannot be described as "raised quite recently." It received an award of merit in 1887, while Siam received a similar award last year.—JOSEPH JACOB.

[We regret the errors and thank our correspondent for having pointed them out.—ED.]



# NOTES FROM CONTRIBUTORS

## ST. DABEOC'S HEATH.

I WAS glad to see in THE GARDEN for February 7th (page 75) your contributor "A. T. J." singing the praise of St. Dabeoc's Heath (or, to quote his title exactly, St. *Daboec's* Heath). It is undoubtedly one of the best of all the smaller ericaceæ. It is as easy as possible, has a better and less straggling habit than most, and a longer flowering period than any. In Connemara, where it is abundant over a large area, it prefers the drier places, mingling with *E. cinerea*, *E. Mackaui* and *Calluna* on banks and delighting in growing up through the dense cushions of *Ulex Gallii* that populate the less boggy parts. In May it is already in flower, and in October bloom is still frequent. It does not vary much in nature. Darker or lighter shades of blossom occur, and twice I have found a white-flowered plant. Naturally it grows straggly, but, like many other species, it is much more bushy and compact in the garden. Though in its Irish habitat it occupies an area where frost is rare and slight, in the Pyrenees it occurs high up where the winter is severe. In our gardens it appears capable of withstanding without inconvenience any weather that comes.

A word as to its name, both Latin and English. St. Dabeoc was a well known Irish saint of the fifth or sixth century, and abbot of Lough Derg in Donegal, a spot still highly venerated and a noted place of pilgrimage for the devout. His name appears in various forms in ancient manuscripts, but while the prefix may vary, the root word, *Beoc* or *Bheoc* persists, and (this is the point I wish to make) *Bæc* is never found, and would be, indeed, impossible as an Irish word. The first connection of the saint with the beautiful heath which bears his name occurs in connection with the discovery of the plant in Ireland about 1699 by Dr. Edward Lhwyd, Keeper of the Ashmolean Museum at Oxford. This was announced in a letter from him to Dr. (afterwards Sir) Tancred Robinson dated August 25th, 1700 (and eventually printed in the Philosophical Transactions for 1712). He did not there mention any name for the plant, but John Ray, in his "Historia Plantarum" (Vol. III, Dendrologia, page 98) quotes him for the statement *Erica S. Dabeoci Hibernis*—"the St. Dabeoc's Heath of the Irish": this was in 1704. When Linnæus came along with his binomial names ("Species Plantarum, ed. 2, page 509, 1762), he quoted Ray as above, but named the plant, not *Erica Dabeocii* as he ought to have done, but *Erica Dabæcii*. How this happened it is impossible to say—perhaps it was a *lapsus calami*, perhaps an uncorrected compositor's error. (Even Linnæus could nod, for, as a matter of fact, he misquotes Ray, writing *Dabeci* instead of *Dabeoci*!). But the damage was done, and when David Don in 1834 placed the plant in a separate genus, he followed the Linnæan spelling, and called the genus *Dabæcia* instead of *Dabeocia*, being no doubt unaware of the facts of the case. Under the international rules of botanical nomenclature a name once duly given cannot be changed, even if given in error. So if we want to be strictly law-abiding, *Dabæcia* must stand as the botanical designation. But if we cannot now make the Latin name right, we certainly have no justification for making the English

name wrong, and the plant remains St. *Dabeoc's* heath. Even as regards the Latin name, it seems a not very serious crime to follow C. Koch ("Dendro-logie," II, 2, page 132), who in 1872 corrected the name to *Dabeocia*. The plant is one of that very interesting group which includes the arbutus, London pride and Cornish heath—that grows in the Pyrenees or along the Mediterranean, and also in south-western England or in Ireland, and which appears to be a relic of a time when a continuous coast line and a milder climate allowed them to spread freely along the western edge of a larger Europe.—R. LLOYD PRAEGER.

[The mistake in the title of the article in our issue of February 7th was due to a printer's error.—ED.]

## PABCO THERMOGEN MULCH.

RECENTLY there has been a great deal said about "this new mineral mulch, which appears to have proved a great success

They are the result of crossing *Duc van Thols* with *Darwins*, and were one of the last big contributions—if not the very last—that the now defunct house of Krelage of Haarlem made to our garden bulbs. I am trying some under glass and some in the open ground. Those under glass were bought as "mixed." The few named varieties which I "ran to" were very much more costly and were all planted out of doors. Of these more, when I see how they behave and what they are like. The mixed ones, grown in pots under glass have been a decided success. One hesitates to make any sort of ex cathedra pronouncement upon their future with the limited experience of one season, but I feel I am well within the mark when I advise those who like to have tulips with decent stems in the early part of February to give them a trial. I mean those who, like myself, have but little heat at their command. They know full well the sight of arrested growth with swollen looking stunted blooms



THE ST. DABEOC'S HEATH, OF MORE OR LESS STRAGGLING HABIT.

on the pineapple farms of America. To test its efficiency an experiment was conducted in these gardens with *Tomato Golden Queen*, with a view to comparing the amount of water supply and weeding necessary between two observation beds, one of which was dressed with the mulch. The result was very promising and showed that the mulch minimised evaporation, with obvious benefit to the soil and considerably reduced the necessity of watering. The growth of weeds was made impossible and the ground surface did not cake. The mulch appeared to have some influence on the plants, for the growth was more vigorous than the check bed and the fruit ripened quicker. The yield was also greater than the unmulched bed.—R. LEDLIE, *Government Horticultural Gardens, Lucknow*.

## MENDEL TULIPS.

NO retail British list that it was my fortune to come across in the autumn of 1924 contained any offer of this new race of tulips, either in separate varieties or in mixture. Hence I am possibly not far wrong when I suggest that few people know much about them.

bursting out of bits of green, which in happier circumstances would be stem and leaves. They know the pitiful sight only too well and "learned" by repeated failures have given up trying to grow them. Mendel tulips hold out the olive branch of hope. That, at least, is my summing up of my present experience. Treated in every way like some early-flowering varieties which had been planted for comparison, they threw up decent stems and good flowers, while they (the ordinary earlies) were miserable failures. There were no yellows, but there were all manner of red shades. Some were taller and some shorter. Some had quite an agreeable perfume. To parody Lancelot Brown I would say of these new comers, "They have great potentialities."—JOSEPH JACOB.

## ASPARAGUS UNDER DIFFICULTIES.

THE growing of this popular and highly desirable vegetable has probably caused more worry and disappointment to gardeners and their employers than almost any other crop one can mention. Bed after bed has been planted in successive years, and



## Beautiful Garden Books

### SECRETS OF MANY GARDENS

By Mrs. PHILIP MARTINEAU

17 full page illustrations. 12s. 6d. net

### THE HERBACEOUS GARDEN

By Mrs. PHILIP MARTINEAU

Fourth Enlarged Edition. 32 plates. 12s. 6d. net

### ROCK GARDENS

By LEWIS MEREDITH

Third Edition. Many illustrations. 10s. 6d. net

### ONE GARDEN:

AN INTIMATE CHRONICLE OF ITS MAKING

By D. H. MOUTRAY READ

Profusely illustrated. 12s. 6d. net

### TREE WOUNDS AND DISEASES: THEIR PREVENTION AND TREATMENT

By A. D. WEBSTER

Profusely illustrated. 7s. 6d. net

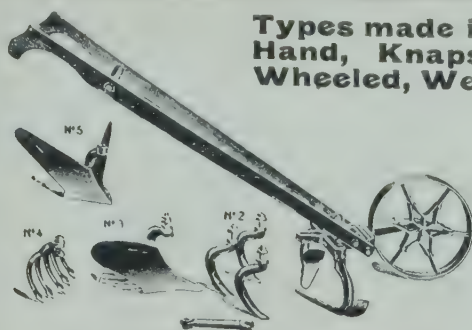
### EVOLUTION of PLANTS

By Dr. D. H. SCOTT

Fully illustrated. 2s. 6d. net

FOR FULL GARDEN CATALOGUE WRITE TO:  
**WILLIAMS & NORGATE, LTD.**  
14, HENRIETTA STREET, LONDON, W.C.2

Please mention THE GARDEN when writing.



Types made include Pneumatic, Hand, Knapsack, Bucket and Wheeled, Wet and Dry Sprayers  
Prices from— **10/-**

Write for Full Particulars and Catalogues.

### VERMOREL 'ECLAIR' SPRAYING MACHINES

Gained the Highest Awards given in their respective classes at the Royal Horticultural Society's Trials, 1924.



Horse and Hand Hoe Cultivators

**70/- & 35/-**

**COOPER, PEGLER & CO., LTD.**

24a/26c, Christopher St., Finsbury Sq. LONDON, E.C.2

### HIGH GRADE FERTILISERS FOR QUALITY AND ABUNDANCE.

**No. 1. SEMI-ORGANIC—PERFECT GENERAL PLANT FOOD.** Both Stimulating and Lasting.

Amm. 4.5 Phos. 22.5 Sul./Potash 5.6 7 lbs. 1/10 14 lbs. 3/3 28 lbs. 6/- 56 lbs. 11/- 1 cwt. 20/-

**No. 2 ORGANIC PROMOTING HUMUS.**

Best Substitute for Stable Manure, Excellent Plant Food, Lasting, Gives Good Heart to Soil.

Amm. 5.5 Phos. 18.2 Sul./Potash 4.8 7 lbs. 2/- 14 lbs. 3/6 28 lbs. 6/6 56 lbs. 12/- 1 cwt. 22/-

**No. 13. 56 lbs. 9/- SPECIAL ORGANIC LAWN.** 1 cwt. 16/-

Promotes very fibrous turf and thick mat fine grasses.

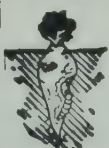
Cash with order. Carriage Paid U.K.

**H. P. TRIPP, Orchard Works, VIEWSLEY, MIDDX.**

"T  
R  
I  
P  
P  
L  
E"

BRAND

### KILOGRUB



Exterminates all Garden Pests in the soil.  
Your Seedsman has it.

Tins:—9d., 1/6, and 2/6.

bags:—½-cwt. 6/6; ½-cwt. 9/6; 1-cwt. 15/-.

Write for particulars to the manufacturers—  
**JOHN PEAK & Co., Ltd., Wigan, Lancs.**

### FERTILISERS.

LAWNS, 20/-; FRUIT TREES, VINES, 19/6;

GENERAL GARDEN USE, 17/-;

WORM KILLER, newly introduced, 19/-

Per cwt., carriage paid. Also all other fertilisers.

**HY. RICHARDSON & CO.,**  
Skeldergate Bridge Works, YORK

## GREAT SPRING OFFER

## Stock Your Garden NOW at Half Price

Packet of Exhibition Sweet Peas free with 10/- orders

ORDER EARLY AND SECURE A BARGAIN

### 5,000 APPLES, PEARS, PLUMS, CHERRIES

Must be cleared. 3- and 4-year trees, bush or cordon, at 1/-, 2/- and 3/- each. Apples: Cox's, Bramley's, Ellison's Orange, King Pippin. Plums: Victoria, Belle de Louvain, etc. Pears: Fer-tility, Williams, Beurre, Hardy. Cherries: Morello, White Heart. Red and Black Currants: 2- and 3-year, 3/- and 4/6 doz. Raspberries: 1/- doz., 7/- 100. Hailshamberrries: 4/- doz. Loganberries: 9d. and 1/- each. Strawberries, 4/6 100. 1 Sage, 6 Mint, 6 Thyme (Golden and Common), 1 Rue, 1/6, carriage paid.

### 8/6 doz., ENGLISH BUSH ROSES.

All best names. Los Angeles, Mrs. H. Morse, Daily Mail, Gen. McArthur, Mrs. H. Stevens, etc. Ramblers, 1/- each. All colours. Standard Roses, all our own grown, 3/- each. Marechal Niel, W. A. Richardson, 7/6 each.

### ORDER EARLY AND GET FIRST CHOICE.

Clematis, all colours, 2/- each, large plants, all named; Wistaria, 2/6; Broom, 1/6 and 2/-; Golden Elder, 1/-; Sweet Briar, 9d.; Veronica, 6d.; Acer Negundo, 6d.; Euonymus (golden and green), 6d. and 1/-; Lilac, 1/6 and 2/-; Laurustinus, 6d.; Ribes (scarlet), 1/-; Honeysuckle, 1/6 and 2/-; Std. Crab, Std. Thorns (scarlet, white, and pink), 7/6 each. Evergreen Privet, 10/- 100.

### PERENNIALS TO PLANT NOW.

12 Delphiniums (fine named varieties), large clumps	5/6
12 Phlox	5/6
12 Iris, fine shades (choice varieties)	3/-
12 Potentillas, orange and scarlet	4/6
12 Alstroemeria (Golden Peruvian Lily)	3/6
12 Rock Plants in 6 varieties (named)	2/6
12 Scented Double Peonies	5/6
12 Polyanthus (2-year clumps)	2/-
12 Carnations, lovely shades	2/-
12 Pinks (Mrs. Sinkins and Her Majesty)	2/-

### ALL 6d. PER LOT.

6 Pansies, 2 Red Hot Poker, 6 Arabis, 12 Cheiranthus, 2 Poppies, 2 Lupins, 10 Montbretia, 2 Aubrietia, 6 Forget-me-not, 4 Helianthus, 2 Delytra (Bleeding Heart), 3 Hollyhocks, Sweet Williams, 2 Anchusa, 3 Gypsophila, 3 Heuchera Sang., 6 Lily of Valley, 4 Chrysanthemum max., 2 Anemone japonica.

### 500 GIANT SWEET PEAS FREE.

with a large packet of Clarke's Mammoth Onions (contains 2,000 seeds), 1/3, post paid.

100 Glorious Gladioli (5 named colours), Flame, Scarlet, Pink, White, Yellow, Mauve, Blue, etc., 7/6 post free.

Enormous blooms (one of our customers secured 2 first prizes last year) Gold Medal Begonias, double and single, Orange, Pink, Red, White, Lemon, 2/6 doz.

All orders over 20/- carr. paid. Smaller orders please add extra  
Get our Illustrated List. Post free, containing our wonderful offer.

**CLARKE'S ROYAL HAMPTON NURSERIES (Dept. G), HAMPTON, MIDX.**





**Carters**  
TESTED SEEDS

Carters Leather-Jacket Killer

**"KIL-JAC"**

A non-poisonous, safe, sure and easy cure

For further particulars apply to

**James Carter & Co**

Grass Seed and Turf Specialists,  
RAYNES PARK, LONDON, S.W.20

Please mention THE GARDEN when writing.

**EUREKA WEED KILLER**

LABOUR SAVERS. "EUREKA" LAWN SAND, SOIL FUME, NICOTINE, INSECTICIDES, FUMERS, SPRAYS, AND OTHER CHEMICALS AND SUNDRIES. SEE LIST. PLEASE ASK YOUR AGENT FOR THE EUREKA ARTICLES—THEY ARE ALWAYS SATISFACTORY. IF ANY DIFFICULTY IN OBTAINING, WE SEND DIRECT, CARRIAGE PAID.

Only Address: TOMLINSON & HAYWARD LTD LINCOLN.

Please mention THE GARDEN when writing.

**"ACME" WEED KILLER AND LAWN SAND**

Weed Killer.—Tin to make 25gals., 3/-; for 50gals., 6/-; Postage 9d. on each; for 150gals., 15/- carriage paid.

Lawn Sand for destroying weeds and moss.—28lbs., 7/-; 56lbs., 13/-; carriage paid on lewt., 25/- Fertilizes the grass.

Acme Chemical Co., Ltd., Tonbridge, Kent

Please mention THE GARDEN when writing.

GARDEN DESIGN is best dealt with in "Planning and Planting of Little Gardens," by G. DILLISTONE, 6/-; by post, 6/6. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**GARDEN LOVERS**

Write for Catalogues of  
**PROTHEROE & MORRIS**

• HORTICULTURAL SALES •

MONDAY · WEDNESDAY & FRIDAY  
67, 69 Cheapside, London E.C.2. Phone: City 3856

AND IN ADDITION  
AN AUCTION SALE OF  
**TOPIARY WORK**

(Clipped Box and Yew),  
RARE SPECIMEN CONIFERS, GARDEN  
FURNITURE and ORNAMENTS, etc.

On FRIDAY, APRIL 3rd.

CATALOGUES POST FREE ON APPLICATION.

Please mention THE GARDEN when writing.

**THOMSON'S MANURES**

Famous for  
half a century.  
Unrivalled for all  
Garden Crops.

Sold by  
Seedsmen and Nursery-  
men everywhere.

Sole Makers—  
**WM. THOMSON  
& Sons, Ltd.,  
CLOVENFORDS**



**BAYLISS, JONES & BAYLISS LTD.**  
FOR ALL KINDS OF  
**IRON FENCING**  
VICTORIA WORKS  
WOLVERHAMPTON  
LONDON OFFICES & SHOWROOMS  
119 & 141 CANNON ST.  
E.C.4.

Labels on the right: GARDEN ARCHES, TRELLIS, ESPALIER, LIGHT HOUSES, ETC.

Labels on the left: CORRUGATED SHEETS, FREE GUARDS, WIRE NETTING, ETC.

**WATTLE HURDLES**

6 feet long

24, 30, 36, 42, 48, 54, 60, 72 inches high  
PLEASE STATE QUANTITY.  
**ERNEST R. SMITH & CO., Haslemere, Surrey**

Please mention THE GARDEN when writing.



IS YOUR LAWN SATISFACTORY?  
**DAISIES, DANDELIONS, &c.,**  
are all very disfiguring, besides being detrimental to true Tennis or Croquet

THE PROVED **Velvas** LAWN SAND.

WILL REMOVE THEM AND WILL STIMULATE THE GRASS.

SEASON'S PRICES.

In Kegs	In Bags	In Tins
112-lb. .. 29/6	112-lb. .. 26/6	14-lb. .. 5
56-lb. .. 16/-	56-lb. .. 14/3	7-lb. .. 3/-
28-lb. .. 9/6	28-lb. .. 7/3	3-lb. .. 1/9



If your Seedsman does not carry a stock, send your order  
direct to the Manufacturers:  
**ROBINSON BROTHERS LIMITED,  
WEST BROMWICH.**

Please mention THE GARDEN when writing.



in many cases the results have been so poor that the attempt to grow it has been abandoned and the usual conclusion come to is, "Oh, asparagus will not grow here." Most gardeners know of such places. No doubt certain places are better adapted for the growing of asparagus than others, but there are few places, if any, where it cannot be grown with considerable success.

The accepted formula is to prepare the ground well as to drainage, manuring, pulverising, etc., then either buy in plants or have them previously at home and plant in April, and under the necessary conditions this plan succeeds generally. But great care has to be used in the work, and very often the results are not anything like in proportion to the care and labour expended.

The writer has been in two places where he was assured asparagus could not be grown, and as he has been successful in having good asparagus in both (the first lot now over twenty years old) he hands on the information in the hope that it may be useful to some readers of THE GARDEN.

The site should, of course, be the best available. Soil as light and well drained as possible, the exposure as nearly south as may be and not too exposed to rough winds. The preparation is much as for planting. Work in plenty of old manure, bones, burnt soil and sand as can be spared. Trench or double dig at least 2ft. in depth, breaking up and adding to both spits. If the bottom spit is not so good as the top, leave it below and add plenty of opening material to it. Leave the surface rough till April, when it should be well broken up with digging forks and the whole made level.

The beds should be about 5ft. wide, leaving an extra foot for an alley between each, these not being formed the first year. Have the drills drawn out as for any seed of the same size, say, 1½ ins. in depth and 18 ins. apart, and place the seeds separately therein about 4 ins. to 6 ins. apart.

It is well to put good stout pins either at the ends of each row or at the corners of each bed so that the exact position of rows may be easily found. When the young plants appear keep the ground well stirred and free from weeds with the Dutch hoe to promote a rapid and healthy growth, and when large enough thin out to 12 ins. to 18 ins. apart. Place twigs round each for support and encourage by every means during the growing season. After the tops die off in autumn give a good mulch all over the bed of some good short manure, stable manure being best for heavy soils.

The second spring, spread a good coating of rough sand over the mulch and fork the whole into the surface soil of the bed. Attend to staking and cultivating as before during the second growing season, and repeat mulch in autumn.

The third year the alleys may be formed and the soil used to raise the level of the beds. A good dressing of salt or sulphate of ammonia may be given in this and subsequent years. If anything like success has been attained, a moderate cutting may be had on this, the third, spring, and thereafter a plentiful supply should be available. Where ground is to spare a bed should be sown each year, when one of the older ones may be lifted and forced for early supplies.—NIL DESPERANDUM.

#### EARLY FLOWERING BULBS ON THE ROCKERY.

WHETHER or not bulbs are out of place on a rockery is, perhaps, a matter of opinion; but, whatever arguments are raised in objection, it cannot be denied that the majority of the earliest flowering plants on a rockery are either bulbs or corms.

Having had a lax spell as far as blooms are concerned, it is with delight we witness the appearance of these floral "heralds of spring."

On taking a walk through the rock garden in the month of February, one is immediately struck by the beauty of the modest snowdrops, prominent species in flower being *Galanthus nivalis* (the common snowdrop), the stately *G. plicatus* (a native of the Caucasus), the large-flowered *G. Elwesii*, and the broad-leaved though rather small-flowered *G. latifolius*.

Growing in close proximity to these the lovely blue flowers of *Scilla bifolia* and, a few days later, *S. sibirica* provide a pleasant freshening of colour.

Supporting the blue, the diminutive yellow-flowered narcissus minor var. *minimus* calls for admiration; while among a number of crocuses, *C. Balansæ*, *C. chrysanthus* var. *albidus* and *C. Imperati* strive for supremacy. *Bulbocodium vernum*, though perhaps not so neat and attractive, is, nevertheless, a welcome February arrival, and *Cyclamen Coum* is also present. The snowflake, *Leucojum vernum*, and its variety, *L. v. carpaticum*, are now much admired for their unique, drooping, bell-shaped blossoms.

*Iris reticulata* var. *histrioides* was the first of the genus to appear, but some of its brethren are on the verge of opening.

Those in the south will probably be favoured with a far greater variety than is contained in the foregoing list, but let me state that we in the north would wait long enough for blossoms in the rockery were it not for the boldness of the bulbs.—W. H., Glasgow.

### PHOSPHATE OF AMMONIA PHOSPHATE OF POTASH

Very concentrated, especially suitable for high-class Gardening Fertilisers

PERRY & HOPE, LTD., Nitshill, nr. GLASGOW

#### Whitley and Monkseaton Urban District Council.

TENDERS are invited for the supply and delivery to Monkseaton Siding of GOOD QUALITY TURF, suitable for Bowling Greens.

Quantity required 1,700 square yards. Tenders, sealed and endorsed "Turf," stating price per square yard (to be measured when laid on the Green) together with a sample of the turf to be supplied, to be sent in to me, the undersigned, on or before noon of Monday, the 30th day of March, 1925.

The Council do not bind themselves to accept the lowest or any Tender.

ARTHUR BARKER,  
Clerk to the Council.

Council Offices,  
Whitley Bay.  
14th March, 1925.

### Don't Burn Your GARDEN RUBBISH

MAKE IT INTO  
SYNTHETIC  
FARMYARD MANURE

By the ADCO Process

(Patented in the United Kingdom and Abroad.)

During the past two years some thousands of gardeners have treated their vegetable refuse of all kinds with ADCO Accelerator. The resulting manure has given general satisfaction under very varied conditions as regards soil and climate. Whenever sufficient green vegetable waste, e.g., grass cuttings, weeds, etc., are collected to form about half the heap.

#### ADCO ACCELERATOR

Is the best and cheapest means of converting this into an organic fertiliser equal to or better than farmyard manure.

If you Dealer does not stock ADCO write direct to us, mentioning his name and nearest Goods Station

56 lb. of ADCO Accelerator make One Ton.  
28 lb., 4/6      56 lb., 8/-      1 cwt., 15/-

All Carriage Paid. Cash with Order.

ADCO, LTD.,



40, Harpenden, Herts

38th SEASON

## Mrs. PYM'S Famous Plants

GOOD AND CHEAP

Send for New Spring Catalogue  
— NOW READY. —

Plant NOW for Success.

Magnificent choice hardy Perennials,  
Rockery Plants, Spring Flowering  
Plants, Hardy Climbers, Choice Hardy  
Flowering Shrubs, Splendid Plants for  
Cool Greenhouse, &c.

ALL STRONG HEALTHY PLANTS.  
THE BEST I HAVE EVER HAD TO  
OFFER. EVERY PLANT A BARGAIN.

Named, carefully packed and guaranteed  
to arrive in excellent condition. Stock  
your gardens with really excellent plants.

Mrs. PYM (F.R.H.S.)

10, Vine House, Woodston, Peterboro'

## SELECTED SEED POTATOES

King Edward VII, 7lb. 1/-, 14lb. 1/6, 28lb. 1/3, 56lb. 5/-, 112lb. 7/6; Evergoods, 7lb. 1/-, 14lb. 1/9, 28lb. 3/-, 56lb. 5/6, 112lb. 10/-; Epicure, Sharpe's Express, Eclipse, Queen Mary, Majestic, 7lb. 1/3, 14lb. 2/-, 28lb. 3/9, 56lb. 7/-, 112lb. 13/6; Midlothian Early, Tinwald Perfection (Scotch), King Edward (Scotch), 7lb. 1/6, 14lb. 2/6, 28lb. 4/9, 56lb. 9/-, 112lb. 17/6; Best Cooking Potatoes, 28lb. 2/9, 56lb. 5/- 112lb. 9/6.

BAGS FREE. FREE ON RAIL.  
Cash with Order.

MONEY RETURNED IF NOT SATISFIED.  
Send for Illustrated Catalogue free.

JOHN WOODWARD CURTIS,  
CHATTERIS, CAMBS.

## FEED THE LAWN AND KILL THE WEEDS IN ONE ACTION

At this time of the year your  
grass will greatly benefit if  
treated with

## COOPER'S LAWN SAND

which kills Daisies, Buttercups,  
Plantains, Moss, &c.; acts as a  
lawn food and assists growth  
and distribution of the finer  
grasses.

Prices: 2 lb. 1/3 7 lb. 2/6 14 lb. 4/- 28 lb. 7/6  
56 lb. 13/- 112 lb. 25/-.

Ever tried Cooper's Wormkiller  
on the grass? It prevents the  
hard level surface being spoilt  
by mud-casts.

Prices: 2 lb. 1/- 7 lb. 1/9 14 lb. 3/- 28 lb. 6/-  
56 lb. 10/6 112 lb. 18/6.

If unable to obtain locally, write

WILLIAM COOPER & NEPHEWS, Ltd.,  
BERKHAMSTED.



## BOOK REVIEW

REFERENCE has often been made in these pages to the books of Dr. L. H. Bailey and the high standard of excellence which is attained in all the volumes of which he is the author. This latest work, "The Principles of Vegetable Growing," by Dr. L. H. Bailey, published by the Macmillan Company, New York, price 20s., is not a new volume, but is a completely revised edition of the original, which was published in 1901. The excellence and general practical value of the book is testified by the fact that this is the eighteenth edition. It treats comprehensively of the general principles underlying the raising of vegetable crops, the plants themselves, the diseases to which they are subject and their ordinary culture. Chapters are devoted to the forcing of vegetables and their treatment under glass and in hotbeds, with notes on the general management, the land and its treatment with reference to the tools to be employed. A chapter which is both interesting and instructive is that on seeds and seedage, dealing with their testing, growing and sowing. Finally, a chapter on marketing, storing and drying, together with a complete index brings one to the end of the volume. The personal and human interest is kept to the fore throughout its pages, a most necessary fact when one is dealing with an important economic subject. Criticisms might be levelled at certain omissions, but the limits of a single handy book on the subject, such as this volume is, precludes the introduction of a mass of detail in vegetable culture. Readers in this country should bear in mind that the advice given is based on conditions in America, but nevertheless the general principles laid down will be found to apply equally well in this country. It is a sound practical volume and should be thoroughly appreciated by all gardeners, both professional and amateur.

**Norfolk and Norwich Horticultural Society.**—The annual meeting of this Society was held in the Guildhall, Norwich, on February 14th. The Lord Mayor of the City presiding. The report commented on the Spring Show of 1924 as the finest display of spring flowers ever held in the city. The day of the Summer Show was the wettest for all July and most materially affected the "gate" receipts. The Chrysanthemum Show was well patronised. Reference was made to the loss of Mr. Sydney Morris, Lord Ailwyn and Lord Suffield, all of whom were patrons and exhibitors at the Society's shows. In presenting the statement of accounts Mr. Herbert Perry, one of the auditors, pointed out the set backs to income during 1924, nearly £120 was lost owing to the wet day of the Summer Show and the public had not patronised the Spring Show as one had hoped, consequently the Society was in deficit to an amount of over £60. Sir Bartle Frere was elected president for 1925 upon the proposal of Captain J. H. Mander. On the proposal of Mr. H. Perry the vice-president elected for the year was Mr. J. E. Moxey, Framingham Hall. Captain Sandys Winsch, Parks Superintendent was re-elected Secretary. It was decided to hold a one-day Spring Show in Norwich at the latter part of April, the date of the Summer Show was fixed for June 25th, and the Autumn Show near the end of November.

## PUBLICATIONS RECEIVED.

"The Journal of the Kew Guild for 1925," Vol. IV, No. XXXII. The Journal serves as a link between present and past Kewites and stands for an object which all men who have passed through Kew Gardens should support. To men whose years of training

are now but a fragrant memory, the Journal comes as a refreshing and invigorating tonic, containing as it does all the news of their *alma mater*. There are many interesting features in this volume, apart from general news of members and bulletins, such as an interesting article on The Botanic Gardens at Singapore, by the Director, Mr. I. H. Burrill. The Journal is well printed, and to the editor, Mr. Ernest Dunk, we offer our congratulations on the excellence and general usefulness of the volume.

## CATALOGUES RECEIVED.

Messrs. Barr and Son, King Street, Covent Garden, W.C.2.—List of Hardy Perennials, Rock Plants, Hardy Climbers and Wall Shrubs.

Messrs. Maurice Prichard and Sons, Riverslea Nurseries, Christchurch, Hants.—Herbaceous and Alpine Plants, Shrubs and Climbers.

Clarence Elliott, Six Hills Nursery, Stevenage.—Seeds of choice Alpine and Herbaceous Plants.

Messrs. Stuart Low and Co., Bush Hill Park, Middlesex.—Carnations for 1925.

J. W. Crow, Simcoe, Ontario, Canada.—A List of Choice Gladioli, including many new varieties, fully described, with notes on culture.

Messrs. Allwood Brothers, Haywards Heath, Sussex.—A Spring Catalogue that all carnation lovers should have. During the past year Messrs. Allwood have scored many new triumphs. One of the hits of the season is undoubtedly the raising of the new Bizarre Seedling Perpetual Border Carnations, which are of hardy constitution and should do excellently in all positions, provided free drainage is supplied. A few novelties in their Allwoodii strain are described, and these appear to be a distinct advance on any of their predecessors. With the acquisition of new varieties in all shades and tones of colour, this race is becoming increasingly popular in the garden.

An omission was made in the report of the R.H.S. Show on March 11th. The Freesia Wistaria shown by Mr. Dalrymple gained a first class certificate.

## LOBELIA HUNTSMAN

Finest of the Scarlet Cardinal Flowers.

NOW is the Time to Plant.

1/6 each, 15/- dozen, 100/- 100

T. SMITH, Daisy Hill Nursery, Newry, Co. Down

## County Borough of Southport

The SCHEDULE for the  
SECOND GREAT ANNUAL

## Southport Flower Show

— is now ready —

THE SCHEDULE CONTAINS  
— A LIST OF JUDGES —

The 23 Silver Challenge  
Trophies, the Medals and Cash  
Prizes offered, represent a total  
— amount of over £2,900 —

Spaces 15ft. by 10ft. will be provided  
inside the Show Ground for Exhibits of  
HORTICULTURAL SUNDRIES at  
— £5 per space —

Schedules and plan of Show ground showing the positions  
for the Horticultural Sundries exhibits, may be obtained  
post free on application to the SECRETARY, FLOWER  
SHOW, TOWN HALL, SOUTHPORT.

HERBACEOUS  
PHLOXES : :

(Please see article on page 174)

This is the time to plant these useful Autumn Flowering Plants. The selections below represent the best of their colours, and will be found thoroughly reliable and satisfactory.

## 12 Phlox, 9/-

(Carriage Paid)

Baron van Heeckeren,

new salmon - 1s.

Europa, snow white, carmine centre, 8d.

Evelyn, large salmon pink, extra - 1s.

Fireglow, brilliant orange-scarlet - 1s.

Homeland, brilliant orange-red - 9d.

Jules Sandeau,

handsome dwarf pink - 1s.

Le Madhi, rich dark violet - 9d.

Mia Ruys, handsome dwarf white - 1s.

Mrs. M. Van Hoboken,

large soft pink - 8d.

Rheinlander, salmon-pink, splendid, 9d.

Thor, salmon-red, red centre, splendid 9d.

Vald Jensen,

salmon-red, white star - 1s. 6d.

One each above Strong Plants, 9s.

12 threes, 25s. 6d.

(Carriage Paid)

## 12 Phlox, 6/6

(Carriage Paid)

Baron van Dedem,

clear scarlet-red - 6d.

Eclairer, carmine-violet, early - 6d.

Eliz Campbell, lovely pale pink - 8d.

F. A. Buchner,

perfect pure white, extra - 8d.

G. A. Strohlein, fine orange scarlet 9d.

Gen. van Heutz,

salmon red, white star - 6d.

Jos. Gerbaud,

snow white, cherry eye - 8d.

Marechal Foch, bright crimson-red, 8d.

Mad. Paul Dutrie, soft pale pink - 8d.

Mons. Kind,

orange-scarlet, first rate - 6d.

Rijnstroom, large handsome pink - 6d.

Selma, pink-cherry, red eye, fine - 9d.

One each above Strong Plants,

6s. 6d. 12 threes, 17s. 6d.

(Carriage Paid)

## CATALOGUES FREE

**HARKNESS & SONS, F.R.H.S.**  
THE  
**BEDALE, YORKS.**  
NURSERIES,



# THE GARDEN.

**WATERER'S GOLD MEDAL RHODODENDRONS.** Azaleas, Rare Hardy Shrubs, Alpine and Perennial Plants, Vegetable and Flower Seeds, Scotch-grown Seed Potatoes, paragon, 3 year 17/6, 2 year 12/6 per 100. Catalogue free.—**WATERER, SONS & CRISP, LIMITED,** Twyford, Berks; Ashot, Surrey; and London.

**WAKELEY'S PATENTED HOP MANURE.** The original and only substitute for Stable Manure. See advert on back cover.

**WM. DUNCAN TUCKER & SONS, LTD.,** Wrentham Road, South Tottenham, N.15.—Conservatories, Winter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**BIRDS' BATHS, GARDEN VASES, SUN-TRAPS, NESTING BOXES.** Catalogue (No. 4) free.—**BORTON,** 60, Buckingham Palace Road, S.W.

**RIVERS' ASPARAGUS.**—Strong roots, one, two and three years old. Fruit trees, Roses, Vines and Orchard house trees of first-class quality. A large stock always on view. Inspection invited. Price list post free.—**THOS. RIVERS AND SONS, LIMITED,** The Nurseries, Sawbridgeworth, Herts.

**TANNED GARDEN NETTING,** small mesh, 25yds. by 1yd., 2s.; 25yds. by 2yds., 4s.; 40yds. by 1yd., 6s. 3d.; 40yds. by 2yds., 6s. 6d.; 40yds. by 3yds., 9s. 9d.; carriage paid. Compare our netting with others. Lists now ready.—**GALLOP, Net Manufacturer,** Hastings. Telephone: 352.

**TO LOVERS OF ROCK GARDENS.**—Inexpensive plants for sale. Apply **NELL SHAW,** Hatfield Place, W.11.

**WELLS' CATALOGUE OF CHRYSANTHEMUMS** now ready, and will be sent post free on application.—**W. WELLS & Co.,** Merstham, Surrey.

**WM. ARTINDALE & SON,** Nether Green Nursery, Sheffield, will be pleased to send their Catalogues of Hardy Plants, Seeds and Gladioli on request.

**ALPINES, ROCK PLANTS ONLY.**—Descriptive Catalogue 600 varieties, free.—**TERRY LEE, F.R.H.S.,** 2, Morden Road, Stechford, Birmingham.

**ALPINE AND HERBACEOUS PLANTS.**—For the Mixed Border, for Rock Gardens, large or small, for borders in one colour, or for special seasons. We supply Ideas as well as Plants, and shall be pleased to submit plans.—**HEPPARDS,** Shawhurst Nursery, Hollywood, Birmingham.

**ROCK PLANTS,** best varieties, inexpensive, list free.—**MARION GLEDSTANES,** Fardross, Clogher, Ireland.

**IPSWICH RARE SEEDS.** Catalogue describing nearly 3,000 kinds now ready. Free on application to **THOMPSON AND MORGAN,** London Road, Ipswich.

**HERBERT CHAPMAN'S Bargain List of Job** Lots of choice Daffodils, offered in order to clear ground, is now ready, and will be posted to anyone sending a p.c. to **HERBERT CHAPMAN, LTD.,** Rotherside Gardens, Rye, Sussex.

**DO YOU WANT TO WIN PRIZES?** The new bench has a lure that few can resist, but to be successful you must have knowledge. That knowledge can be obtained from "The Horticultural Exhibitor," by A. J. Macself, one of "The Home Garden Books." Send for prospectus of this series to the publishers, **THORNTON BUTTERWORTH, LIMITED,** 5, Bedford Street, Strand, W.C.2.

**MECONOPSIS WALLICHII,** the lovely sky-blue Satin Poppy: Strong plants, 3, 4/-; 6, 7/6; post free.—**MILNE,** South Darley, Matlock.

**HARDY PRIMULAS.**—Superb plants. *P. frondosa* (lilac), *pulverulenta* (crimson), *Julia* (purple), *rosea* (pink), *sikkimensis* (sulphur), *denticulata* (helio), *japonica* (blush); any 6, 4/6; post free.—**MILNE,** South Darley, Matlock

**LOAM.**—Fibrous Yellow Turf Loam. Illustrated Catalogue Free.—**A. B. JOHNSTON,** New Park, Cranleigh, Surrey

**BARR'S FLOWER & VEGETABLE SEEDS,** of finest selected strains and tested growth, also the best Scotch grown, hand-picked Seed Potatoes, strong Asparagus Plants, etc.

**BARR'S HARDY PERENNIALS, ALPINES, ROCK PLANTS, AQUATICS, CLIMBERS, TALL and DWARF FLAG IRISES, etc.,** for Spring planting.

**BARR'S LILIES, GLADIOLI, DAHLIAS, CANNAS, MONBRIETIAS, ANEMONES, BEGONIAS, TUBEROSES, TIGRIDIAS, &c.,** for Spring planting. Catalogues free.—**BARR & SONS,** King Street, Covent Garden, W.C.2.

**THE DOUGLAS CLOVES AND BORDER CARNATIONS;** glorious scent, stiff stems, and continuous flowering. The new crop of seed is now ready to sow. 2s. 6d. and 5s. per packet. Plant catalogue now ready.—**J. DOUGLAS** (The Premier House for Carnations), Gt. Bookham.

**A FEW SHRUBS WORTH GROWING:** Embotrium, Tricuspidaria, Pittosporums, Mimosa (6 sorts), Hardy Eucalyptus, Eupatorium, Clanthus, Habrothamnus, Viburnum tomentosum, Coronilla glauca, Sollya heterophylla, Drimys Winteri, Calceolaria violacea, also Hardy Tree Ferns, Woodwardia and Chamerops. We solicit your enquiries.—**TRESEDER & Co.,** Nurseries, Truro.

**IRON AND WIRE FENCING FOR GARDENS.**—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—**BOULTON AND PAUL, LIMITED,** Norwich.

**ALL PROFESSIONAL GARDENERS** should become Members of the British Gardeners' Association. Full particulars (stamp).—**JOHN WEATHERS,** 1, Park View, Isleworth.

**SEWAGE DISPOSAL FOR COUNTRY HOUSES.**—No emptying of cesspools; a perfect fertiliser; no solids; no open filters: perfectly automatic; everything underground. State particulars.—**WILLIAM BEATTIE,** 8, Lower Grosvenor Place, Westminster.

**JAMES BACKHOUSE, F.L.S., F.R.H.S.,** for many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to **CAER FELLA, Arthog, North Wales.**

**LAXTON'S NEW SEED CATALOGUE,** containing Novelties for 1925. New Pea "Bedford Champion" and "Laxton's Progress," post free on application. Fruit Tree Catalogue and Cultural Hints can also be sent, post free, on request.—**LAXTON BROTHERS,** Nurserymen, Bedford.

**YORK STONE PAVINGS,** crazy or rectangular, rustic copings, steps, roughly squared or random shaped, flat bedded wallstones, garden edging, rockery, etc.—**SAMUEL JOHNSON AND SON,** Quarry Owners, Mirfield, Yorkshire.

**CHOICE NEW CHRYSANTHEMUMS.**—Our Catalogue of nearly 900 varieties, including Grand Novelties for 1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready. Post free on application.—**J. W. COLE AND SON,** Chrysanthemum Specialists, Peterborough.

**PRIMULA, ALPINE AND PERENNIAL** Seeds, from large (1,500) collection, sold cheap. List free.—**REV. J. F. ANDERSON,** Glenn Hall, Leicester.

**GARDEN NETS.**—Best tanned, small mesh, 25yds. by 1yd., 2/-; 25yds. by 2yds., 4/-; 25yds. by 3yds., 6/-; 25yds. by 4yds., 8/- Carr. Paid. Satisfaction guaranteed. Tennis nets from 10/-. Special nets for tennis boundary. Pea training nets. Lists and samples free.—**G. JARRETT,** Net-maker, Rye.

**CANADIAN AND AMERICAN GLADIOLI.**—The best of the standard varieties and novelties.—**J. W. CROW,** Simcoe, Ontario, Canada.

**TENNIS COURT FENCING.**—A speciality. Made up as complete enclosures, with standards, wire, and straining posts, from 6 ft. to 12 ft. high. Write to Dept. FP/G for particulars.—**BOULTON AND PAUL, LTD.,** Norwich.

**THE WORLD'S MOST POPULAR DWARF PEAS.**

Per half-pint. 1/6	Sutton's Pioneer. Big Crop. Early Maturity. Small habit of growth. Require practically no sticks.
Post free.	

**SUTTON AND SONS, THE KING'S SEEDSMEN, READING.**

**DOBBIE'S 1925 CATALOGUE AND GUIDE,** 136 pages, 194 illustrations. Free to all readers. Please mention THE GARDEN when writing.—**DOBBIE & Co., LTD.,** Edinburgh.

**BATH'S SELECT SEEDS AND PLANTS.**—New Illustrated Catalogue of choice Vegetable and Flower Seeds and Plants is now ready, and will be sent post free on application. (Dept. E), **R. H. BATH, LTD.,** Floral Farms, Wisbech.

**CHEAP GOVERNMENT WIRE!!!** Great for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—**GREEN'S GOVERNMENT STORES,** 69, Albert Street, Lytham.

**108 GLADIOLI for 8s. 9d. post paid.**—The most dazzlingly brilliant flowers on earth, with spikes of blooms 18ins. long; 12 each of 9 kinds (108 bulbs), all separately packed and named, for 8s. 9d., post paid; half lot. 4s. 9d., post paid (cultural instructions and beautifully illustrated Flower and Vegetable Catalogues included).—**J. KAY AND Co.,** Goodmayes Road, Goodmayes, Essex.

**BEGONIAS AND GLOXINIAS.**—Kay's prize strain with blooms often measuring 8ins. across; a collection of 12 Single and 12 Double Begonias, also 6 Gloxinias—all separately packed and named, with cultural instructions and illustrated catalogues, for 6s. 3d., post paid; half lot. 3s. 6d., post paid.—**J. KAY AND Co.,** Goodmayes Road, Goodmayes, Essex.

**HEDGING PLANTS:**  
**PRIVET:** Strong, English-grown, bushy and well rooted.  
 30-36ins. . . . . at 13s. per 100  
 36-40ins. . . . . at 15s. per 100  
**QUICKTHORN:** Extra bushy, . . . . . at 10s. per 100,  
 24-30ins. . . . .  
 All Carriage Paid on 1,000 Lots.—**HODSONS,** Castlegate, Nottingham.

**MICHAELMAS DAISIES.**—Pyrethrums and other hardy perennials. For new catalogue write to Mrs. **THORNELEY,** Nurstead, Devizes.

**SALVIA "VATICAN."**—Lovely mauve, 3 ft., rosy bracts, lasts long in beauty, 2/6 free. Orders booked for **Crimson Velvet Scabious.**—Mrs. **PHILIP MARTINEAU,** Wellsbridge Cottage, Ascot.

**GARDEN NETTING.**—Best selected, small mesh, tanned, 25 by 4 yds., 8/-, or 8 yds., 16/-. Carriage paid. Tennis Nets and Standards. List free.—**STRAWBERRY NETTING Co.,** 5, Suffolk Terrace, Lowestoft.

**LOOK! TANNED GARDEN NETS.**—All orders despatched same day. 25 yards by 1 yard, 2/-; 25 by 2, 4/-; 25 by 3, 6/-. Odd netting for bushes, 6 lbs. for 2/6. All carriage paid. Any sizes supplied. Also Tennis Boundary Nets.—**MOORE & Co.,** Net Works, Rye.

**CAULIFLOWER PLANTS.**—Best (Autumn-Sown) Plants.—Early London and Walcheren, 12/6 per 1,000; prompt delivery, carriage paid; cash with order. Special quotation for large quantities, and Price Lists of all varieties of Cabbage Plants (Autumn-Sown) of the best stocks and at the lowest prices, on application.—**JOHN GILLIES, PRESTONPANS, LTD.,** Prestonpans, East Lothian. Largest cabbage plant growers in Britain. Established over 50 years. Telegrams: "Plants, Prestonpans." Telephone 24 Prestonpans.

**GRANDFATHER CLOCK,** daily, Veneer Inlaid, Enamel Dial, going order. £15 or offer.—**DAVIDSON,** 153, Hampstead Way, N.W.11.

**GREENHOUSE PAINTING AND GLAZING.** "Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7lb. tins, 4/- post free; 14lb. tins, 5/6, each, carriage extra, tins free.—Full particulars from **W. CARSON & SONS,** Grove Works, Battersea, S.W.11.



## ECKFORD'S GIANT FRILLED SWEET PEAS —FOR 1925—

**GORGEOUS FLOWERS. MAGNIFICENT STEMS**  
For a wealth of cut flowers.  
For garden decoration. For exhibition

**ECKFORD'S ARE THE WORLD'S BEST**

**Special Offer.**—25 specially chosen 1/- packets of Eckford's Giant Frilled Sweet Peas for 1925, each separate and named for **20/-**  
The same 25 half-packets, each separate and named, for **10/-**

The above are a gorgeous range of colour  
**WRITE FOR CATALOGUE FREE.** Also pedigree  
vegetables and choicest flower seeds

**HENRY ECKFORD, THE Sweet Pea Specialist Wem, Shropshire**

Please mention THE GARDEN when writing.

## THE FLORAIRE NURSERIES (H. CORREVEON, PROP.)

Chene-Bourg, near GENEVA (Switzerland).

The OLDEST FIRM for ALPINE PLANTS.

## ALPINE PLANTS

Grown from seed and acclimatised for English Gardens.

**SEEDS** Of all Alpines, Shrubs and Perennials, for Rock Garden, Herbaceous Border, &c.

The most complete collection including many rarities not to be had elsewhere.

APPLY FOR CATALOGUE.

Please mention THE GARDEN when writing.

## Reliable Lincolnshire Seed Potatoes

**Specialty Selected Stocks.**—Sharpe's Express, Eclipse, Sir John Llewellyn, British Queen, King Edward's, Queen Mary, Ally and Majestic. Large or small quantities

—When writing please state quantity required to—

**W. DENNIS & SONS, LTD.**

(Dept. No. 12), KIRTON, BOSTON, Lincs.

Please mention THE GARDEN when writing.

**STORRIE'S** Unique and Descriptive Catalogue of Seeds, Tiny Seedlings and Bushy Transplanted Plants is now ready. If you have not yet received a copy a Postcard will bring you one.

**STORRIE & STORRIE, The Specialists,** Glencarse, PERTHSHIRE.

Please mention THE GARDEN when writing.

38th SEASON

## Mrs. PYM'S Famous Plants

**GOOD AND CHEAP**

Send for New Spring Catalogue  
— NOW READY. —

Plant NOW for Success.

Magnificent choice hardy Perennials, Rockery Plants, Spring Flowering Plants, Hardy Climbers, Choice Hardy Flowering Shrubs, Splendid Plants for Cool Greenhouse, &c.

ALL STRONG HEALTHY PLANTS.  
THE BEST I HAVE EVER HAD TO OFFER. EVERY PLANT A BARGAIN.

Named, carefully packed and guaranteed to arrive in excellent condition. Stock your gardens with really excellent plants.

**Mrs. PYM (F.R.H.S.)**

10, Vine House, Woodston, Peterboro'

Please mention THE GARDEN when writing.

# Common or Garden Weeds

are shortlived when brought into contact with COOPER'S WEEDICIDE.

Don't let weeds on the paths or drives mar the beauty of your garden

DESTROY THEM WITH

## COOPER'S WEEDICIDE

:: 1 to 100 parts water. ::

It's so easy. Order from local agent, apply as directed, and the path weeds will disappear.

Prices: Pt. tin 2/- Qt. 3/3 1/2 gall. 5/6 1 gall. 9/- 2 galls. 17/- 5 galls. £1/18/6

\* \* \*

Should you prefer a Powder Weedkiller try **HERCULEAN POWDER WEEDKILLER.**

Prices: Small tins to make 12 1/2 galls of ready-for-use Weedkiller 1/9. Medium tins to make 25 galls 3/-. Large tins to make 100 galls. Weedkiller 11/-.

If you have difficulty in getting a Cooper Weedkiller please write to **William COOPER & NEPHEWS, Ltd., Berkhamsted.**



1 quart Weedicide makes 25 gallons highly effective Weedkiller.

## The Glen Road Iris Gardens

SPECIALIZE IN RARE AND FINE VARIETIES OF BEARDED IRISES

Send for List

Grace Sturtevant, Prop.

Wellesley Farms . Massachusetts . U.S.A.

## VIOLETS FOR BEDS, ROCK GARDENS AND NATURALIZING.

MISS STANISTREET can supply now healthy young plants, properly selected, and packed by an expert, from her Unique Collection of over 50 Varieties.

:: Descriptive List Free. ::

KILLALOE, CO. CLARE.

## WM. ARTINDALE & SON NURSERYMEN — SHEFFIELD

Winners of the

SIR ALBERT STEPHENSON SILVER CUP AT THE SOUTHPORT FLORAL FETE FOR GLADIOLI

—CATALOGUES ON APPLICATION—

## SEEDS McHATTIES' SEEDS EXHIBITION SPECIALITIES

MASTERPIECE ONION . . . per pkt., 6d. & 1/-  
IMMENSITY RUNNER BEAN . . . per pint, 2/6  
IMPERIAL EXHIBITION BROAD BEAN, per pint 1/-

The above are a few of our Scotch Strains for Show purposes. WRITE FOR LIST, post free.

McHATTIE & CO. Scotch Seed House, CHESTER

He won't eat  
beyond the protection  
line of

Of all chemists  
and stores

**SANITAS  
POWDERS**

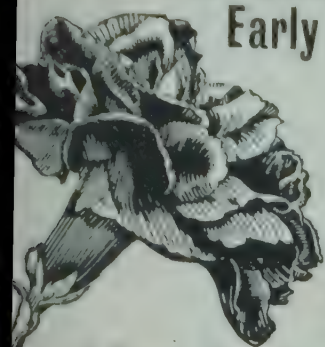
Caterpillars, slugs, snails and worms, birds, rats, and mice—they all hate Sanitas Powder and avoid its neighbourhood.

Sprinkle Sanitas Powder on flowers and plants; dust it on the soil. There is no poison in it. Try a 1/3 tin, or write for bulk quotation.

THE "SANITAS" CO. LTD. LIMEHOUSE, LONDON, E.



# ant CARNATIONS & ALLWOODII



Early

for Best Results  
this year.

CATALOGUE of all  
Carnations for Garden  
and Greenhouse, also  
NEW COLOURS in  
Allwoodii, post free on  
request.

Special Collections at  
Carriage and Packing  
Paid prices:—

## HARDY PERPETUAL BORDER CARNATIONS

6 Plants, Distinct Varieties .. 15/-  
12 " " " .. 27/6

## ALLWOODII (Half Carnation, Half Pink)

6 Plants, Distinct Varieties .. 6/6  
12 " " " .. 12/-  
25 " " " .. 22/6  
6 Novelties " " .. 15/-

## CARNATION PERFUME.

ALLWOOD BROS. new and unique  
CARNATION PERFUME is stocked by  
leading Chemists at 1/6, 3/6, 5/-, 8/-,  
10/-, and 15/- per bottle, or, in case of  
difficulty in procuring, direct from

Allwood Bros

The leading  
Carnation  
Specialists  
in the World.

Dept. 4, Haywards Heath, Sussex.

Please mention THE GARDEN when writing.

# Austins

## THE SCOTCH SEED HOUSE for QUALITY

have during the past few years staged at the principal shows  
best exhibits of Garden Produce ever seen in Scotland and  
received the highest awards, including the Gold Medal of  
Royal Horticultural Society. We can confidently recom-  
mend our seeds as the finest strains in existence.  
Catalogues for particulars of vegetable seeds, also Sweet  
Antirrhinums, and all other Flower Seeds, Gladioli,  
Liliums, &c. Copies Free.

## AUSTIN & McASLAN

Mitchell Street, GLASGOW, C.1

Established 207 years.

# SEEDS

IF YOU WANT

# REALLY GOOD SEEDS AT MODERATE PRICES

SEND TO

## ROBERT SYDENHAM LIMITED

10, TENBY STREET, BIRMINGHAM

No one will serve you better.

# VEGET PEAS A SPECIALITY THEIR UNIQUE LISTS

contain only the Best

VEGETABLES, FLOWERS AND  
BULBS WORTH GROWING

Post free on application

## ROBERT SYDENHAM, LIMITED

Please mention THE GARDEN when writing.

# BEDALE ROSES, FRUITS AND HARDY PLANTS

Full descriptions in Catalogue, Free on Request. Mention "The Garden."

12 GIANT ORIENTAL POPPIES for 7/6  
Duplex, light scarlet, nearly full double; Joan Pybus,  
salmon-pink; Joyce, rich cerise shade; King George,  
scarlet, fringed; Mrs. Harkness, apricot-salmon;  
Mrs. Perry, salmon; Nancy, large deep crimson;  
Perry's White, pure white; Princess Ena (the  
Tulip Poppy); Princess Victoria Louise, rose-sal-  
mon; Rembrandt, brilliant scarlet; William of  
Orange, pretty light orange.

12 Giant-flowered Delphiniums. All  
named, choice varieties, 18/-

2 NEW ORIENTAL POPPIES  
Ethel Swete, brilliant rich cerise, distinct from all  
other shades. Received Award of Merit from R.H.S.,  
London. 1/6 each; 15/- doz.  
Mrs. H. G. Stobart, brilliant cerise-pink, charming,  
good habit; both are vigorous growers. 1/6 each;  
15/- doz.  
Special Offer.—3 of each for 7/6. Carriage paid for  
cash with order.

12 Giant-flowered Delphiniums. Ex-  
tra choice, best varieties, 30/-

## G. GIBSON & CO., LEEMING BAR, BEDALE

# SEED POTATOES

	Cwts.	56lbs.	28lbs.	14lbs.
May Queen -	16/-	9/-	5/-	2/9
Duke of York -	13/-	7/-	4/-	2/3
Midlothian Early -	13/-	7/-	4/-	2/3
Sharpe's Express -	11/-	7/-	4/-	2/3
Sir John Llewellyn -	12/-	7/-	4/-	2/3
Bellise -	11/-	7/-	4/-	2/3
Sharpe's Victor -	16/-	9/-	5/-	2/9
Epicures -	14/-	8/-	5/-	2/9
British Queen -	11/-	7/-	4/-	2/3
Immune Ashleaf -	14/-	8/-	4/-	2/-
Edzell Blue -	18/-	10/-	5/-	2/6
King Edwards -	9/-	5/-	3/-	1/6
Rhodoric Dhu -	14/-	7/-	4/-	2/-
Ally -	16/-	8/-	4/-	2/-
Great Scot -	14/-	7/-	4/-	2/-
Kerr's Pink -	14/-	7/-	4/-	2/-
Majestic -	14/-	7/-	4/-	2/-
Tinwald Perfection -	12/-	6/-	3/6	2/-
Golden Wonder -	12/-	7/-	4/-	2/-
Arran Victory -	18/-	10/-	5/-	2/6
Arran Chief -	11/-	7/-	4/-	2/6

Sacks free Free on Rail Cash with order

SEND FOR LIST OF OTHER VARIETIES

J. W. CROSS POTATO GROWER Elm Road,  
WISBECH.

Try our "Marvel" Collection of dependable  
seeds for a 300 yards' plot, carriage paid for 5/-  
Potatoes excluded! Catalogue included!

UPSTONES, Seed Experts, ROTHERHAM

## NEW YARD LONG RUNNER BEAN

The Most Wonderful Bean in the World. Very prolific, one  
pod enough for one person.

40—1 6, 80—2 3, 120—3/-

GIVEN FREE WITH ALL ORDERS—Packet of our  
Famous Golden Balloon Prize Winning Onion Seed. Onions  
grow 2-5 lbs. in weight. Also a packet of our latest novelty  
Giant Brussels Sprout Seed.

Address—H. GALE, King's Somborne, Hants.

# NEW CHINESE RHODODENDRONS

A few superb hardy novelties. Plant in April & May

R. Clementinae (Kingdon Ward 4177), white, suffused  
pink, darker markings. First discovered by G. Forrest  
in 1913. 4-5ins. 7/6  
R. racemosum (Forrest 19404), pink. This is Forrest's  
finest form; a very suitable shrub for rock gardens or  
mass planting. 9-12ins. 7/6  
R. fastigiatum forma (Kingdon Ward 4456). Another  
fine dwarf species with deep purple flowers and crimson  
style. 12-16ins. 7/6  
R. muliense (Kingdon Ward 4023), bright sulphur  
yellow 9-12ins. 7/6  
R. cephalanthum Series (Kingdon Ward 3998), varying  
shades of a rose pink to milk white 7/6  
R. Arboreum Series (Kingdon Ward 3784), flowers of the  
deepest crimson. 6-12ins. 10/-  
R. Lapponicum Series (Kingdon Ward 4184), brilliant  
lavender-blue. 6ins. 7/6  
R. yunnanense (Kingdon Ward 4309-4322), blush pink  
with brownish crimson markings, one of the best species  
for the ordinary garden, vigorous under almost any  
conditions. 8-12ins. 5/-  
R. ficolacteum (Kingdon Ward 4509), pure white with  
a crimson blotch; magnificent foliage. Worthy of the  
best situations in the garden. 5-6ins. 10/-  
R. Virgatum Series (Kingdon Ward 4994) of the deepest  
pink hue; autumn flowering. 10-12ins. 5/-  
R. Delavayi (Kingdon Ward 3948), scarlet, with black  
glands. 9ins. 10/-  
R. "Silver Pink" (Kingdon Ward 4177), a delicate rose  
pink with purple markings. 4ins. 5/-

This fine set of twelve for £4 4s.

Full list of hundreds of new Rhododendrons on application.  
When ordering please mention this paper.

HILLIER & SONS, Tree Specialists, WINCHESTER

Please mention THE GARDEN when writing.

# CAULIFLOWER

"MAY QUEEN"

The fastest growing, quickest heading variety in existence.  
Planted now, large white heads may be cut during May  
and June. Plants, ready now, 3/6 for 100; 500 for 16/-; 1,000  
for 30/-. Carr. paid. Packed in boxes, with cultural hints.

DANIELS & SON, WYMONDHAM,  
NORFOLK.

Please mention THE GARDEN when writing.

# BEGONIAS

In superb quality and extra large tubers for Greenhouse or Bedding.

DOUBLES, in 8 colours, flowers like large Roses and Camellias .. ..	6/- per doz.	42/- per 100
DOUBLES, in mixed colours .. ..	5/-	35/-
SINGLES, in 6 colours, very large fine shaped flowers .. ..	4/6	30/-
SINGLES, in mixed colours .. ..	3/6	24/-
SINGLES, frilled or crested, in 6 colours .. ..	5/-	35/-
SINGLES, frilled or crested, in mixed colours .. ..	4/-	28/-

Collections of 36 large tubers, 12 doubles, 12 singles, 12 frilled singles, 14/-

Post free on orders of 15/- and over.

Send for FREE Catalogue of named Double Begonias for Exhibition, Basket varieties, Cyclamen,  
Carnations, Delphiniums, Gloxinias, Polyanthus, etc.

## DELPHINIUMS

The ONLY collection to receive in 1924, the R.H.S. Gold Medal, the highest award obtainable.

Plant NOW. We have pleasure in offering the following Collections which are specially good value, in strong ground  
roots, which will make a fine show of bloom this year.

Collection A, 12 extra good sorts .. ..	65/-	Collection C, 12 fine sorts .. ..	30/-
" B, 12 very choice sorts .. ..	42/-	" D, 12 good sorts .. ..	22/-
Collection E, 12 average sorts .. ..	15/-		

Catalogue FREE. Apply

BLACKMORE & LANGDON :: BATH

Please mention THE GARDEN when writing.



# CHRYSANTHEMUMS

We guarantee to give every satisfaction with the following selections.

	Per doz.
12 of the best new Japanese (1924) varieties ..	15/-
12 " " " standard " " " " " " " "	5/-
12 " " " incurved " " " " " " " "	5/-
12 " " " decorative double varieties ..	4/-
12 " " " singles ..	4/-
The above are for flowering inside from October until Xmas, and the following for flowering in the garden from August to October.	
12 of the best distinct double varieties ..	7/6
12 " " " standard " " " " " " " "	4/-
12 " " " single varieties ..	4/-

## PERPETUAL-FLOWERING CARNATIONS

We have now for immediate delivery a large and varied stock ready for potting on, 12 of the best varieties ex 2-in. pots, 10/-, Carriage paid if cash with order. 50 in 25 varieties, 37/6, or 100 in 50 varieties, 70/-.

Catalogue or Novelty List sent post free from—

**KEITH LUXFORD & CO.**  
Sheering Nurseries, HARLOW, ESSEX  
and at Sawbridgeworth, Herts.

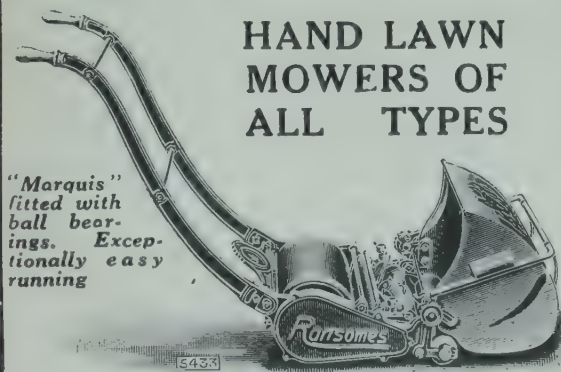


By Appointment.

## RANSOMES' LAWN MOWERS

"The Best in the World."

HAND LAWN  
MOWERS OF  
ALL TYPES



MOTOR, HORSE, PONY  
AND  
DONKEY MOWERS.

PROMPT DELIVERY.

Write for List No. 111 to  
**RANSOMES, SIMS & JEFFERIES LTD.**

ORWELL WORKS, IPSWICH.

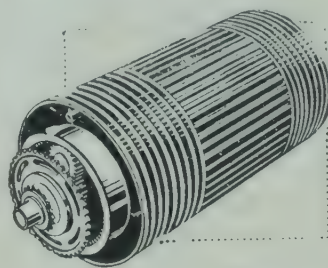
Sold by all Ironmongers and Seedsmen.

Please mention THE GARDEN when writing.



## NO SKIDDING

On the level or on a gradient, the 'Governor' funks nothing. The land roller being scientifically serrated, there is no slipping or skidding, whilst its carefully rounded outer edges bite gamely on wet grass and protect the turf from tearing or ribbing.



The land roller is made in three sections, the centre taking the drive, the two outer acting as differentials when cornering. All three can be locked at will.

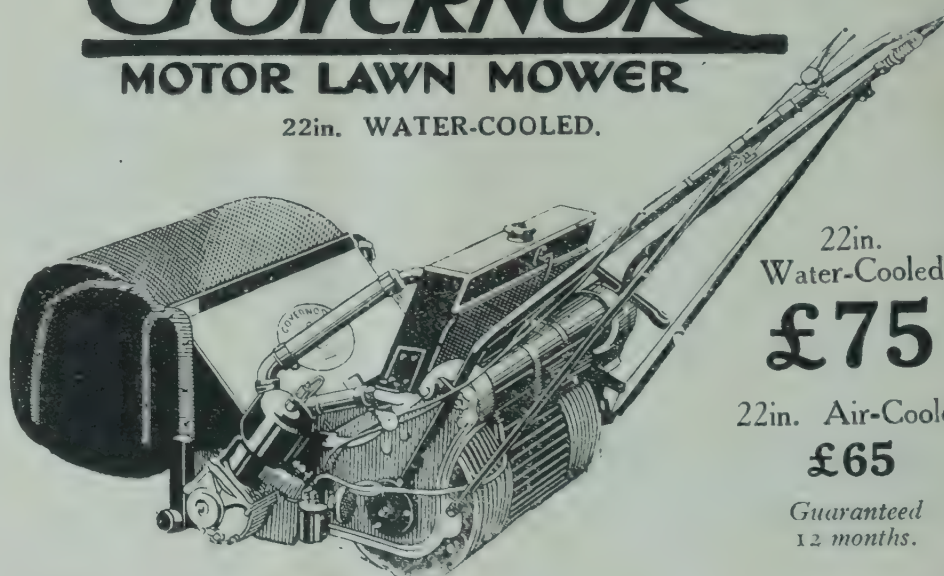
Made throughout for effective, reliable, and economical service, the 22" Water-Cooled 'Governor' is unsurpassed.

Write for Free Illustrated Booklet NOW! We will send you the 'Governor' for a seven days' Free Trial.

"It works while you walk."

## 'GOVERNOR' MOTOR LAWN MOWER

22in. WATER-COOLED.



22in.  
Water-Cooled

**£75**

22in. Air-Cooled  
**£65**

Guaranteed  
12 months.

JOHN SHAW & SONS WOLVERHAMPTON LTD. (Dept. 12),  
WOLVERHAMPTON. Established 1795.

Please mention THE GARDEN when writing.

## WEEDS

### One application of HARRISON'S Reliable WEED KILLER

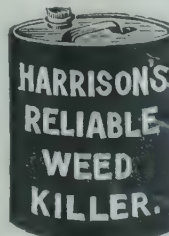
will keep your Garden Paths, Carriage Drives, etc., free from weeds for at least 12 months. The best Killer for Daisy, Plantain and Dandelion in Lawns. Brightens the Gravel. Immense Saving in Labour.

5 Gallons .. 23/6 Drum .. 12/- extra, Carr. Paid  
10 " .. 42/6 " .. 15/- " " "  
40 " .. 150/- Cask .. 80/- " " "

Irish orders are not subject to these carriage terms but are paid to any English port. Full price allowed for all drums and casks if returned in good condition carriage paid within 2 months.

N.B.—In the prices of the above please note that this Weed Killer mixes 1 to 50 of water, being double the ordinary strength. One gallon mixed with 50 gallons of water will cover an area of from 150 to 200 square yards effectively.

**G. HARRISON,**  
Horticultural Chemist,  
**READING.**



Please mention THE GARDEN when writing.

## HILL & SMITH, Ltd., BRIERLEY HILL, STAFFS,

Makers of

IRON FENCING, HURDLES, GATES, WIRE  
NETTING AND GARDEN IRONWORK



Other Products—Hay and Grain Sheds, Dutch  
Barns, Galvanized Corrugated Sheets and  
Structural Steelwork.

Catalogues free on mentioning this paper.

London: 8, VICTORIA ST., WESTMINSTER, S.W.1

Please mention THE GARDEN when writing.



# Hardy Garden Chrysanthemums

(Please read article on page 185)

## 12 SUMMER FLOWERING CHRYSANTHEMUMS 3/-

BRONZE GOACHER, lovely; CRIMSON MASSE, free; DARVEL, mauve, white spots; ELSTOB YELLOW, fine yellow; G. BOWNESS, strawberry; GOACHER'S CRIMSON, best dark; J. M'ALPINE, amber and fawn; MME. M. MASSE, lilac-pink; NINA BLICK, scarlet, fine; NORMANDIE, popular pink; PLUIE D'ARGENT, grand white; WHITE MASSE, very free.  
1 each, 3/-; 3 each, 8/9; 6 each, 17/-; 12 each, 33/-.

## 12 SEPTEMBER AND EARLY OCTOBER CHRYSANTHEMUMS 3/6

BLANCHE POITOU, immense white; CRANFORDIA, immense yellow; CRANFORD YELLOW, very fine; ELIZ. GILLELAND, salmon; FRAMFIELD EARLY WHITE, extra; GOLDEN FRAMFIELD EARLY, extra; HAR- VESTER, grand bronze; LICHFIELD PURPLE, extra; MRS. HUTT, crimson and gold, 9d.; PINK PROFUSION, popular; SEPTEMBER WHITE, immense; SEPTEMBER YELLOW, grand, 6d.  
1 each, 3/6; 3 each, 9/6; 6 each, 18/-; 12 each, 35/-.

## 12 SPLENDID NEW EARLY CHRYSANTHEMUMS 9/-

A. M'ALPINE, golden orange, very large and handsome, 1/-; CHAR. HARLEY, crimson and gold, 1/-; F. WILKINSON, finest yellow, 9d.; CHOCOLATE SOLDIER, chocolate, 9d.; JESSIE M'ALPINE, shell pink, 1/-; J. ROTHER- HAM, salmon-bronze, 1/-; LICHFIELD BRONZE, chestnut, 1/-; TARZAN, immense pink, 1/-; 4 New Singles: BEST- MAN, large deep rose, 1/-; GOLDEN GLEAM, deep orange, 1/-; MAIDENHOOD, lovely primrose, 1/-; RED RIDING HOOD, immense crimson, 1/-.

1 each of these approved novelties, 9/-; 3 each, 25/-.  
All fine transplanted plants ready now, or would be sent any date you wish.

With orders under 5/- value, please send 6d. extra.

Catalogues with descriptions of 400 varieties sent free.

**HARKNESS & SONS, F.R.H.S.**  
THE **BEDALE, YORKS.**  
NURSERIES,

## FOR SPRING PLANTING

THE EXECUTORS OF THE LATE

**ANTHONY WATERER**

BEG TO OFFER

## STANDARD TREES

In Great Variety

Consisting of:

**LIMES, PLANES, ELMS, etc.**

**EVERGREEN and DECIDUOUS SHRUBS, viz.:**

BOX, green and variegated, 3 to 8 ft.

HOLLIES, Common, 5 to 8 ft.

" Variegated and Green varieties, 2 to 6 ft.

THUIOPSIS BOREALIS, 10 to 12 ft.

CUPRESSUS LAWSONIANA, 12 to 14 ft.

SPRUCE FIRS, 6 to 8 ft.

CEDRUS ATLANTICA GLAUCA, very fine, 10 to 14 ft.

OSMANTHUS, PHILLYROEAS, SPIROEAS, LILACS, VIBURNUMS, etc.

## GOLDEN YEWS

A magnificent Stock in all shapes and sizes from 2 to 10 ft.

AZALEAS in great variety, 2 ft. to 8 ft.

RHODODENDRONS, without doubt the finest stock in the trade of named varieties 2 to 6 and 8 ft.

RHODODENDRONS, Standards, in best named varieties.

HARDY HEATHS in great variety, and a good stock of General Nursery Stock.

CATALOGUES UPON APPLICATION.

Enquiries and Inspection invited.

**KNAP HILL NURSERY**  
Woking Station :: SURREY

Please mention THE GARDEN when writing.

# REAMSBOTTOM & CO'S GAY GARDEN ST. BRIGID ANEMONES

NONE GENUINE WITHOUT OUR GOLD MEDAL SEAL

Wonderfully improved in Form and Colours.

FEW FLORAL SIGHTS CAN  
COMPARE WITH A GOOD  
BED OF THEM.

## PLANT NOW.

REAMSBOTTOM & CO.'S  
LATEST IMPROVED  
"GAY GARDEN"  
GOLD MEDAL ST.  
BRIGID ANEMONES

are the finest in the world.  
NONE ARE GENUINE WITH-  
OUT OUR GOLD MEDAL SEAL

12	..	..	..	3/-
24	..	..	..	5/6
50	..	..	..	9/6
100	..	..	..	18/-
1,000	..	..	..	170/-

Full Cultural Directions sent that  
will ensure success to every Amateur

## ALSO PLANT NOW

DELIGHTFUL, FRAGRANT, SPRING-FLOWERING  
AURICULAS. Lovely rich velvety colours, vastly  
superior to those usually seen. If you do not appreciate  
Auriculas, try ours, and you will be delighted. 6, 2/6; 4/9  
doz.

AQUILEGIA (COLUMBINE), long-spurred. The shades  
and colourings of our special strain delight all purchasers.  
Selected, 6, 2/6; 12, 4/6.

ASTER KING GEORGE (NEW). Extra large-flowering  
Michaelmas Daisy; huge bluish-violet blooms, 1/6.

MYOSOTIS ROYAL BLUE. Dark intense electric  
blue; strong grower. 15, 1/6; 100, 7/6.

MYOSOTIS VICTORIA. (Hen and Chickens Forget-  
me-not). Sweetest little blue. 12, 1/6; 24, 2/9; 100,  
8/6.

CHRYSANTHEMUM MAX. FIANCEE (NEW). Showy  
new large white Ox-eye Daisy; strongly recommended,  
1/-.

LUPINUS POLYPHYLLUS. Purple and blue, 4, 1/3;  
12, 3/-.

LUPINUS POLYPHYLLUS ALBUS. White. 4, 1/3,  
12, 3/-.

LUPINUS ROSEUS (Pink Lupins). Our glorious strain  
of these hardy perennial Lupins, most lovely shades of  
pink. 2, 1/3; 6, 3/-.

PHLOX EVELYN (NEW). Large flowers and immense  
size, richest salmon-rose shade, an exquisite novelty, 1/6.

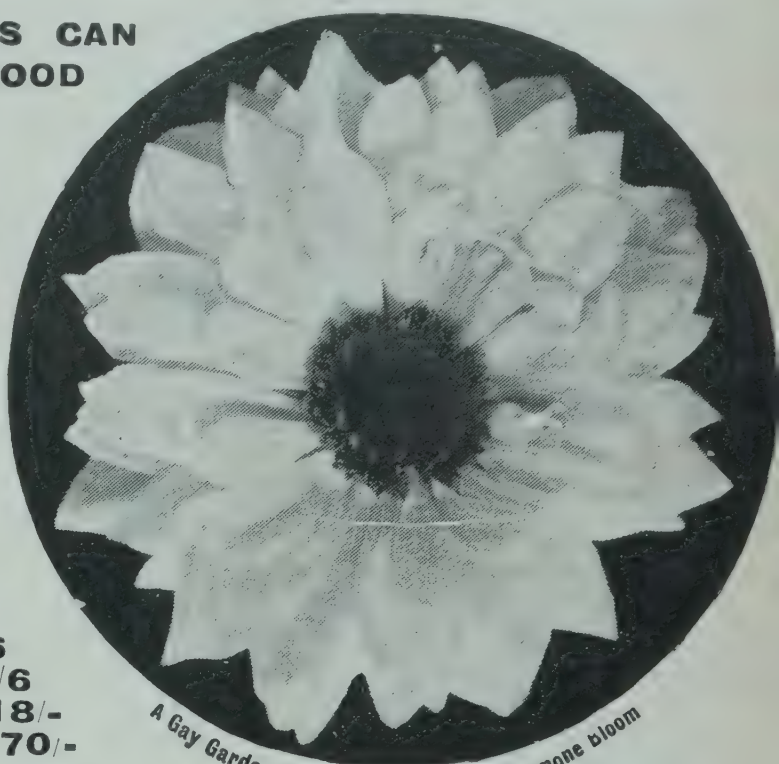
PHLOX FIREGLOW (NEW), huge trusses of brilliant  
orange-scarlet, with dark centre, 1/6.

For other varieties, also Roses, Fruit Trees, etc., please see our ILLUSTRATED CATALOGUE FREE.  
All Cash orders of 15/- value and over carriage paid or post free, packed by experienced hands. For Free Delivery,  
smaller orders, 5/-, 10/-, add respectively for Carriage or Postage, etc., 1/- and 1/9. Safe Arrival and Satisfaction  
Guaranteed.

**REAMSBOTTOM & CO.**

Tower Nurseries, West Drayton, Middlesex (Also at Geashill, Ireland)

Please address to Tower Nurseries, WEST DRAYTON, and mention  
THE GARDEN when writing.



A Gay Garden Gold Medal St. Brigid Anemone bloom

PAPAYER KING GEORGE (str. king novelty), bright  
scarlet, with fimbriated petals. 1/3 each.

PAPAYER MAHONY. Chocolate colour, rare. 1/6.

GAILLARDIA GRANDIFLORA. Oursplendidimproved  
extra large-flowered; choicest rich yellow, with crimson  
or brown markings. 4, 1/4; 12, 3/6.

GENTIANA ACAULIS. The glorious Blue Gentian,  
prized wherever a hardy flower is grown. Very dwarf.  
Likes a loamy soil, with broken stones mixed through  
it. Extremely hardy. 3, 2/3; 12, 7/6.

RED-HOT POKER, TRITOMA UVARIA. One of  
the most noble autumn-blooming plants; the blooms  
resemble so many torches. 2, 1/4; 12, 7/6. Selected.  
1/- each; 10 6 doz.

PRIMULA OBCONICA GRANDIFLORA HYBRIDS.  
Very beautiful Primulas; most valuable window or garden  
plants; never seen to be out of bloom, 3, 1/6; 6, 2/9;  
12, 5/-.

SWEET WILLIAMS. Wonderful Giant Mixture. Our  
strain is a wonderful variety of colours, and customers  
are always delighted with the very large flowers. Giant  
mixture. 15, 1/9; 50, 5/-; 100, 9/6.

EDELWEISS. This very hardy, much-sought-after alpine  
plant has pretty silvery foliage, with star-shaped, silvery  
flowers. 2, 1/3.

HOLLYHOCKS. Single Mixed. Our selection, mixed,  
strongly recommended. 6, 2/-; 12, 3/9.

BERGAMOT (MONARDA DIDYMA). The deliciously  
scented true fragrant Bergamot, with striking scarlet  
flowers. 2, 1/4.

FREE MONEY SAVING BONUS  
COUPON. — 20 Per cent.  
worth of Additional Plants FREE and  
delivered car. paid on orders over  
15/- value if you enclose this  
coupon. Oursplendid  
superb.  
F. G.



# GLADIOLUS

FIRST-SIZE BULBS.  
FINEST VARIETIES.

	per doz.	100
America, lilac rose .. ..	1/6	10/0
Baron Hulot, indigo blue ..	1/9	12/6
Glory of Holland, pure white	1/9	12/6
Golden West, orange-scarlet ..	1/9	12/6
Halley, delicate salmon-pink ..	1/6	10/6
Love's Fire, coral scarlet ..	2/6	17/6
Loveliness, creamy white ..	2/3	15/0
Niagara, nankeen-yellow ..	1/9	12/6
Panama, deep pink .. ..	1/9	12/6
Schwaben, soft yellow .. ..	1/9	12/6
War, deep blood red .. ..	1/9	12/6
White Giant, pure white ..	1/9	12/6
COLLECTION 100 in 10 varieties ..		13/6
„ 120 „ 12 „ .. ..		16/6
„ 240 „ 12 „ .. ..		30/0
Primulinus Hybrids ..	1/5	10/6

All Bulbs Carriage Paid. Catalogue Free.

**WM. POWER & CO.,**  
**WATERFORD.**

Please mention THE GARDEN when writing.

## Toogood's Seeds



The same labour, the same tools, the same manures—  
WITH OUR GUARANTEED GARDEN SEEDS  
ADDED—will yield for you an infinitely better Garden  
than ever before. Send a postcard to-day for our  
160-page beautifully illustrated

**FREE GUIDE TO  
GUARANTEED  
GARDEN SEEDS.**

Every packet ordered thence MUST grow for you  
and please you or you will get it replaced freely:  
and the seeds cost less to buy. Address us personally:

**TOOGOOD & SONS, Ltd.,**  
Seedsmen to H.M. the King, **SOUTHAMPTON.**

Please mention THE GARDEN when writing

Notes from Maidstone.

### DELPHINIUMS

It is still safe to plant Delphiniums. Our List, which will be sent post free contains all the best varieties, such as Rev. Lascelles, The Alake, King of Delphiniums, Mrs. Shirley, Mrs. Townley Parker, Lord Derby; while the beautiful nemophila blue Queen Mary is now offered at the special price of 2/6 each, as we have worked up a good stock.

IRIS may still be planted, and we shall be pleased to send our List.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Maidstone.

Established 1796.

No. 5



The  
Tennis Club  
Secretary

Men who appreciate

The **ATCO**  
MOTOR MOWER

The Tennis Club Secretary is responsible that the courts are kept in good condition and for this reason many secretaries provide their groundsmen with ATCO Motor Mowers. The letter reproduced above—received from the head groundsman at Wimbledon—fully endorses this policy. Free demonstration on your own grass without obligation.

16 inch Model £50 22 in. Model £75. 30 in. Model £95  
Personally Delivered and Guaranteed 12 months

Send for free booklets, "Turf Needs" and "Notes of Praise."

**CHAS. H. PUGH, Limited**

Whitworth Works, 31, Tilton Road, BIRMINGHAM

All England Lawn Tennis Club,  
Wimbledon.

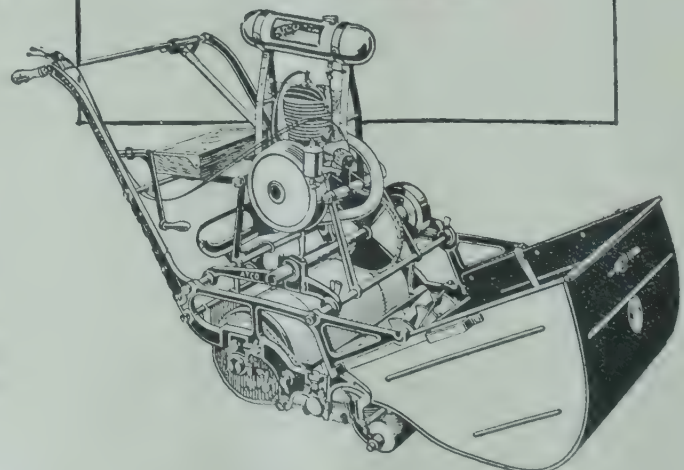
18. 6. 23.

Dear Sir,

We have been using two of your Atco Motor Mowers with satisfaction. The job has been well thought out, particularly regarding accessibility for adjustment and cleaning. Balance is also good. The Cultivator is a valuable accessory for tearing out the rough coarse grass and fining down a lawn.

Yours truly,

Wm Coleman  
Hd. Groundsman.







VOL. LXXXIX.—No. 2785.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post. Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. Entered as Second-class Matter at the New York, N.Y., Post Office. Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.

APRIL 4, 1925

## THE "COFFIN" TREE

THE Chinese are well known for the respect which they give their elders, amounting, in fact, to ancestor worship.

Among other acts of reverence towards parents and grandparents the rich spend large sums in providing and decorating coffins, and even the poor will mortgage all they have in order to give a fitting burial. Many coffins are extremely elaborate, and there is no doubt that some of the best lacquer work that the Chinese have produced is on coffin lids. It is known that several woods are used in the manufacture of coffins, among them various species of conifers. Farrer and I discovered in Upper Burma an instance of the length to which the wealthy Chinaman will go in order to supply a suitable coffin. While collecting around the Hpimaw pass we constantly met long streams of coolies each bearing on his back a single plank about 7ft. long, 3ins. thick and about 3ft. in width. As we had seen no signs of cutting of timber in our neighbourhood, we made enquiries and found out that there was a great export trade to China of these planks from the area behind and north of that in which we were working. This trade was apparently of great age, and, although we saw no full-grown trees, there is little doubt that, while always solitary, the tree from which the planks came was at one period scattered up and down the frontier and may have spread far into the tangled ranges of N.W. Yunnan. Now, however, the supply must be extremely small and is limited to hidden interior valleys where no white man has ever penetrated. Even the officers in charge of the district have never seen a large specimen.

The woodcutters apparently cut down the tree and carve out the planks with the sole help of an adze, for both axe and saw are unknown, consequently the wastage of material must be enormous. Probably the coolies had carried these planks some fifty miles when we met them, and it is certain that their nearest destination possible was Yunnan-fu, a distance of perhaps 400 miles to the east. Yet with all these difficulties this is apparently a flourishing trade, and at the time we were there the Chinese were willingly paying from £50 to £60 for a single plank.

The tree which these planks came from is a species of juniper. We came across a small tree about 50ft. in height and only about 20ins. in diameter 4ft. from the ground. The only other remains that we saw was the shell of a tree obviously destroyed years before by lightning. We took shelter in the shell from a rainstorm, and sat inside in comfort. Indeed, from the marks of fires on the floor, it must have been a favourite resting place for travellers over the Chimili Pass.

The diameter at 4ft. above the ground must have been about 5ft. As the tree is never unwieldy in size of trunk, the height of this giant must have been over 150ft. This makes it at least 50 per cent. larger than *Juniperus virginiana*.

Farrer describes it thus in his field notes: "I have hopes that this may prove the most important economic introduction for very many years past, for it is a, presumably, *hardy*, superior at all points to *J. virginiana*, which it ought to drive off the market for 'cedar' oil, 'cedar' cabinets and 'cedar' pencils. It is, besides, a remarkably lovely, graceful, weeping, grey-green 'cypress' occurring rarely in the ravines of woodland, never under 10,000ft. in a region where the summers are wet and sunless, the winters are alpine cold, and the springs late and ungenial and chilly. The wood is close and fine in grain, immortal, and of the most delicious fragrance, either fresh or burned in strips."

Although Farrer may have been too optimistic regarding the value of this tree from an economic standpoint, I can fully bear out these eulogies. I believe the reason why it is so prized by the Chinese is that it takes lacquer better than any other wood. We sent home pounds of seed, and, although only a few germinated, yet it is easily propagated by cuttings, and it is already listed by several nurserymen either under the name "coffin tree" or under number Farrer 1407. I have had several seedlings in my nursery on the east of Scotland without any winter protection for two years, and I have found it perfectly hardy, although rather slow growing. It is, however, most attractive at any size, for even at 3ins. high it takes on its typical weeping appearance. Although it is still too small to have been thoroughly tested, it appears that any rich loam suits it, but I should say that it should be planted in a position distinctly shady while it is young.

E. H. M. C.

### AMONG OTHER ARTICLES IN OUR NEXT ISSUE WILL BE:

THE CHARM DAHLIAS, by Norman Lambert.

FRAGRANCE IN THE SPRING GARDEN, by H. W. Canning-Wright.

VEGETABLES THAT ARE FLOWERS, by O. A. Merritt Hawkes.

VIOLET CULTURE.



# THREE INTERESTING PLANTS

BY CAMILLO SCHNEIDER.

## ASPIDIUM BRAUNII.

**A**MONG our hardy ferns, *Aspidium*—or as it is very often called, *Polystichum*—*Braunii* (not *Brownii*), is a well known species widely distributed over the whole northern temperate zone. It is found in shady woods, often on rather stony slopes. It thrives best in a good, deep, light but not spongy loam, well mixed with humus, and it needs shade on account of its rather thin leaves. Its fronds are not evergreen, but die in late autumn or during the winter. Their texture is by no means leathery, as in *A. lobatum*, and distinctly softer than in *A. aculeatum*, of which it is often regarded as a variety. Of the true *aculeatum* the leaves are evergreen, but not leathery. But *A. aculeatum*, *A. lobatum* and *A. angulare* really form one species, showing the greatest variability possible. *A. Braunii*, however, is not at all variable, and those forms that seem to be intermediate between *Braunii* and *aculeatum* and its subspecies *angulare* and *lobatum* are now considered as hybrids. The illustration gives a good idea of the pale green, thin, and soft fronds of *A. Braunii*, which usually reach a length of about 2ft. (sometimes almost 3ft.). The scales of the rachis are of a lighter brownish colour and the number of the pinnae usually do not exceed fifteen on each side.

By its light green deciduous fronds *A. Braunii* is easily distinguished from the species most closely related to it, possessing fronds that are bi-pinnate in the lower two-thirds. Other hardy species of the *polystichum* group with roundish sori, like *A. acrostichoides*, *A. Lonchitis* or *A. munitum*, have simply pinnate fronds, while those like *A. laserpitiifolium* have the fronds three to four pinnate in the lower two-thirds.



THE PALE GREEN DELICATE FRONDS OF *ASPIDIUM BRAUNII*.

Of the wild types, *A. Braunii* can be highly recommended for cultivation in a suitable shady corner of even the smallest garden.

## PINUS LEUCODERMIS.

Many years ago while I was travelling in the mountains of Bosnia I had the opportunity to observe this little known form of the widely spread and variable Corsican pine, *P. Laricio*, or as it is now called, *P. nigra*. Of this pine the well known variety *austriaca* or *nigricans* forms large forests in south-eastern Europe, from the vicinity of Vienna to Galicia in the east and Croatia in the south. It grows well on rather barren limestone mountains and is of greatest value for forestry purposes in such places. It needs a somewhat warmer climate than the common Scots pine, but nevertheless does well even in the colder parts of central Europe.

In 1864 Antoine described a new black pine from Bosnia, Serbia and Albania as *P. leucodermis* on account of the whitish appearance of the bark of older trunks. This pine was found a few years ago by Heldreich in Greece on Mount Olympus. It was named *P. Heldreichii* by Christ, who later reduced *P. leucodermis* to a variety of *Laricio*. Other names have been given too, to this interesting and critical form, as for instance, *P. Prenja Beck* and *P. pindica Formanek*. After all there is still a difference of opinion among botanists as to the systematic position of this pine. The main features in which it is said to differ from *P. nigra* are its light grey bark which breaks into angular plates and is described as "schlangenhautähnlich gefeldert," its resin ducts not being surrounded by strengthening cells, and by the colour of the umbo of the cone-scales which is greyish-brown on both sides, not only beneath. The ashy-pale, hardly whitish colour of the stem is, the most reliable character of this pine when seen in its native country. I failed to observe it distinctly on cultivated specimens.

The accompanying photograph shows the oldest but not the largest cultivated plant of *P. Heldreichii* or *leucodermis*. It stands in the arboretum of the famous park of Prince Liechtenstein at Eisgrub in Moravia. It was brought to Vienna in 1864 as a very small plant from Bosnia, and it had been cultivated in a large pot for twenty-four years until 1888, when it was planted at Eisgrub. This accounts for the plant being rather small for its age.

## SOPHORA JAPONICA PENDULA.

During wintertime the characteristic features of some trees are even more obvious than later when the branches are covered with leaves. Especially is this the case in early



THE OLDEST SPECIMEN OF *PINUS LEUCODERMIS*.



spring in such pendulous trees as *Salix babylonica* or in a still higher degree, *S. alba vitellina pendula*, which are very conspicuous when the young branchlets become intensely coloured. They light up among the other dark leafless trees, and form a very striking feature in the landscape.

Next to the weeping willows the pendulous form of our common ash, *Fraxinus excelsior pendula* is a beautiful tree often met with in our gardens. One of its forms called *aurea* also has yellow branches like the willow mentioned. The habit of the ash is a good deal stiffer, and not so soft and graceful as of the willow.

The pendulous tree shown in our illustration is in some respects not unlike the weeping ash, but is otherwise very different from it and from the willow, too. It is a form of the Japanese sophora, *S. japonica pendula*. Even the common form of this good summer-flowering tree has a rather picturesque habit, but more so the weeping variety of which the pendent branchlets are as stiff as those of the ash, but rather short, and of distinct greenish colour. As a single tree on a lawn it is often noticeable, and being of medium size it easily finds a place even in a small garden.

The largest pendulous tree we have is, of course, the weeping red beech, *Fagus sylvatica pendula*, a large specimen of which seems to imitate a waterfall, sometimes one of our pendulous elms may grow tall, but I have never seen a weeping elm that could match a weeping beech. Is not it rather strange that we do not have a real weeping tilia? There is no weeping form of the black poplar, either. The aspen,

*Populus tremula*, has a form with drooping branches. It is very conspicuous, too, in the early spring on account of the reddish young catkins.

The finest pendulous tree with beautiful flowers is certainly *Prunus pendula*, or as it is now called, *P. subhirtella pendula*. There are several other *prunus* with pendent branches, but none of them is as handsome as this Japanese cherry.



THE EXCELLENT WEEPING VARIETY OF THE JAPANESE SOPHORA, *S. JAPONICA PENDULA*.

## EARLY - FLOWERING CHRYSANTHEMUMS

FOR A BRIGHT DISPLAY OF COLOUR IN THE GARDEN IN AUTUMN, THERE ARE, WITH THE EXCEPTION OF DAHLIAS, NO MORE POPULAR SUBJECTS THAN CHRYSANTHEMUMS.

**A**LTHOUGH the dahlia is now a serious rival of the early-flowering chrysanthemum as "The Queen of Autumn Flowers," the latter will still retain a large circle of admirers. The reasons for the popularity of the early-flowering chrysanthemum are not far to seek. It is not an exacting flower, as it does not require continual attention like some of our popular garden subjects—for instance, the sweet pea. It can be used in a variety of ways, either for filling gaps in the herbaceous border which arise when summer-flowering plants cease blooming and can be cut down, or for massed effect in beds and borders where it is the sole occupant. Those who possess a greenhouse, whether heated or not, can have a succession of bloom into the dark days of late October or early November when flowers are scarce by growing a number of the later-flowering "earlies" and lifting them into pots, boxes or the greenhouse border. They fill a gap before the decorative varieties commence to bloom, and the old "stools" can be removed to the cold frame after the last sprays are cut, thereby making room for later varieties.

Chrysanthemums do well in an open, sunny position that is sheltered from prevailing winds by hedges, fences, walls, etc., but it is advisable to keep them away from overhanging trees. The soil should be forked over to a depth of 2ft., and well rotted animal manure and bone meal incorporated at the same time. Too many cases of indifferent displays can be attributed to insufficient soil preparation. As the chrysanthemum is easy to grow, it is a common belief that no preparation of the ground is necessary. It is true that they will bloom if left undisturbed for a number of years, but the quality of bloom from such plants cannot be compared with the excellent results obtained from a thorough preparation of the soil and the renewal of stock.

The preparation of the site should be done as soon as weather conditions will allow to enable the soil to settle down before planting out commences. The time for planting out depends to a large extent on the season and the locality. As soon as all fear of destructive frosts is removed, the plants, after they have been well hardened, should be planted out very firmly. For massed effect they can be placed closer than if specimen plants are desired for the production of cut bloom. Stake the plants as soon after planting out as possible and secure them by two or three ties of raffia. If the period following planting out is likely to bring a continued spell of dry, east winds and the situation is exposed, it is a good plan to place round each plant some slight protection in the form of twiggy growths cut from birch, hazel or alder. During a period of drought in early summer it is sometimes necessary on light soils to water the plants. This should be done in the evening, and it is best to give a thorough watering once a week rather than several light sprinklings each day. The appearance of withered leaves on the lower portion of the stem is a sign of dryness at the roots in the growing period.

During the later summer months, as the plants near the period of blooming, light doses of diluted liquid manure or some artificial fertiliser may be given.

Of old favourites the following are reliable in almost any locality or situation, and they are all of easy culture and very floriferous. Most of them are among the first to bloom, commencing to flower in August in Southern gardens and in early September in the North.

Polly is a lovely shade of deep orange, shaded with amber. It is always a mass of bloom during its flowering period, and as the plant rarely attains a greater height than 2½ft., it requires



little staking. From Polly we have its sports, Crimson Polly (crimson red), Golden Polly (golden yellow) and Abercorn Beauty (deep bronze). Another favourite is Diana, which is of similar habit and blooms about the same time. It makes a fine bushy plant when well grown. The colour is crimson and gold. Golden Diana and Crimson Diana are two fine "sports," the former being particularly good. The "Masse" family is noted for its very floriferous character. All this type are very easy to grow and are most suitable for town or suburban gardens. Improved Masse, a large rosy lilac with a silvery reverse, will give splendid sprays when well treated, and it can also be disbudded if large specimen blooms are required. I am not very fond of its colour. John McAlpine is one of the best of this type. The colour is a pleasing shade of amber and fawn. Others of similar character are George Bowness (crushed strawberry), Horace Martin (yellow) and F. G. Partridge (an improved form of White Masse). Nina Blick, a distinct variety of bright scarlet-red colouring with a flush of golden bronze, is another good old favourite among the very early flowering type.

Following on we have Goacher's Crimson and its "sports" Bronze Goacher and Mrs. J. Fielding (chestnut red), Normandie (blush pink) and Bronze Normandie, a lovely fawn "sport" from it; Chaldon (reddish crimson), very free flowering; Lichfield Pink and Lichfield Purple, both capable of giving very large blooms when well grown; Silver Lining, a very delicately coloured variety, white, with a soft suffusion of pink as though the bloom had been frosted over with this colour; and the rich burgundy crimson coloured Dick Barnes. Most of these varieties are at their best in September, although in the extreme north and in a late season many of the best blooms open in October.

If weather conditions will allow, a succession of outdoor blooms, the following may be used to form the late September or early October crop in a normal season: September White, a large-flowered white that is good either disbudded or in sprays; La Pactole, a big bronzy yellow flower; Pluie d'Argent, a dwarf but very free-flowering white; and Almirante, scarlet-red with gold tips. The latter pays for disbudding, and if it can be lifted the colour is softer when opened under glass and particularly fine in artificial light. All these varieties may be used for lifting. In smoky districts, or if the autumn

is not likely to be fine, it is safer to house them, as the whites become very dirty after a few showers.

One of the finest of the new early-flowering varieties is Alexander A. McAlpine, a rich golden orange with shadings of pale bronze. The individual flowers are large, even when it is grown undisbudded, and it is sufficiently free-flowering to make it useful for sprays.

Saracen was in bloom with me in August before any of the others opened. This is one of Mr. Woolman's 1924 novelties. It is a well built bloom of rich amber colouring with a deeper centre, and it lasts in good condition for a considerable time. Shirley Blush is also a very fine double variety from the same source. It opens a creamy blush, but soon changes to pure white. It is excellent when grown in sprays.

Charlotte Harley and Jessie McAlpine are two fine new varieties from Tollcross. Both are very good. The former is a distinct shade of scarlet-crimson and the latter is blush pink in the open and white when bloomed under glass. Jessie McAlpine belongs to a new type. The florets are narrow and pointed. Even when undisbudded huge flowers can be obtained, and the closely packed centre takes nearly a week to open under glass, so that the blooms will last three weeks in water if cut in the half-open stage. Mr. McAlpine allowed me to grow an advance trial of two of his next season's novelties, viz., Mary Houston and Euphie Ritchie. The former is an improved form of Goacher's Crimson, with a brighter and richer sheen of red; the latter is a tangerine form of Jessie McAlpine. Both are worthy additions to the early-flowering section.

I cannot omit the single varieties, as to my mind these are as beautiful, and perhaps even more graceful for room decoration, being particularly pretty in sprays. There are, however, some fine new additions, which not only have the advantage of better petals, but give large individual blooms which are carried on erect stems. There is now a wide range of colours among the newer single varieties, and most of these are very beautiful in artificial light. Of the varieties I have grown during the past season the best are Delice, a rich shade of bright pink; Morning Star, golden amber; Shirley Terra Cotta, a particularly beautiful shade of terra cotta; Stanley Baldwin, wine crimson; Vicar of Shirley, deep bronze; Dolly Thorpe, salmon apricot; Simplicity, white; and Shrapnel, orange terra-cotta. The last three are standard varieties.

NORMAN LAMBERT.

## EUROPEAN PRIMULAS

(Continued from page 169.)

**PRIMULA MINIMA.**—Locally distributed in the east and central Alps, among other stations, we have this delightful species, which frequents high alpine pastures on both granite and limestone, but chiefly the latter. It is a jewel for the alpine lawn or for companionship with *Gentiana verna* and the like, and forms itself into a compact dwarf mat not more than an inch high, with small, glossy, wedge-shaped leaves that are more or less jagged on the distinct square ends. Flowers of a rosy pink colour arise singly on half-inch stems, and are deeply divided; these appear about June. Scree mixture is quite suitable for its welfare,

and it should have abundant water during the growing season.

**P. GLUTINOSA.**—Although abounding in its native habitats, this plant is not often met with in cultivation, probably due to conditions it enjoys, but not always allowed it. The moraine or underground watering system seems most suitable, this species being particularly fond of moist places. It occurs on granitic formations in the high Alps, and very much resents lime. The leaves are coated with a sticky substance and are ovate in shape. The flowers, which are of an intense violet colour, are borne in heads on dark stems that grow to 2 ins. or 4 ins. in height.



PRIMULA x BERNINÆ HAS DEEP PINK FLOWERS.



*P. ALLIONI* is one of the greatest treasures of the race, but requires almost ideal conditions to make it happy. In nature it seems to prefer positions where the sun cannot strike it direct; still, it will stand a good deal of sunshine here, and thrives with it, but I think the surest aspect is a northerly one, where it can be planted under a slightly overhanging rock so that excessive overhead wet cannot reach its foliage. It delights in a deep limestone crevice, where it can firmly wedge itself and where plenty of water can reach its roots in summer. A compost of limestone chippings, leaf-mould and sand will be found quite satisfactory. It is perfectly dwarf and compact in habit, making cushions of small rosettes of dull grey green leaves that feel clammy and sticky to the touch and which do not exceed an inch in height. From the base of the leaves

*P. GLAUDESCENS*.—Perhaps this species is one of the commonest in rock gardens, which may partly be due to its easy cultivation. It will thrive and prosper in ordinary good loam in a sunny position, and makes tufts of shining glossy green leaves, quite dwarf and compact, from which ascend the dark coloured stems carrying its small heads of deep purple colour in April and May. It is a lime lover, and comes from the Italian Alps.

*P. CARNICOLA*.—A rare and choice species from the maritime Alps, where it frequents the mossy slopes in the shade of the pines. In cultivation, too, it is uncommon, but it is not difficult to grow in a cool, shady corner in a compost of leaf-mould and turfy loam. Its leaves are a bright green, very slightly hairy, and the flowers appear in heads on 4in. stems. They are large



PRIMULA ALLIONII DELIGHTS IN A LIMESTONE CREVICE.

its lovely blossoms appear, sitting tight on the plant. They are large and round and are a clear rosy pink colour. Alpine house conditions are extremely beneficial to its culture and can be well recommended.

*P. SPECTABILIS*.—I have often read the praises bestowed upon this plant, but only to regret not having acquainted myself with its reputed beauty, although I have handled a good many and have had well established and thriving specimens. Only on odd occasions have I witnessed its flowers, which seemed only moderately good. It makes sturdy rosettes of stout dark green leaves and bears heads of bright pink flowers on 3in. stems. It is a limestone lover and requires ordinary good loam and a sunny position.

*P. TYROLENSIS*.—Hailing from the limestones of the Dolomites, we have this (closely allied to *P. Allioni*) species. Charming as it is, it cannot rival its near cousin. Small rosettes are formed of small, almost round leaves, which are covered with minute hairs and have a much serrated margin. As the plant ages the stems become long and are only furnished with old dried-up leaves, with the exception of the rosette of leaves at the tip. The flowers are borne singly on short stems and are large and bright pink. It will grow well in the moraine especially if it be wedged in a sunny crevice in a good gritty mixture where its roots can get well down. Alpine house conditions are also extremely satisfactory.

*P. PEDEMONTANA* is quite a charming little species, although not quite so attractive as some already mentioned, it is still worth including in a good collection. It is dwarf in habit, being but 2ins. or 3ins. high. The leaves are leathery with margins of short, dense, snuff-brown hairs, which are a feature of the plant. The flowers are carried in loose heads on slender stems and are of a rose shade. A well drained pocket or sunny ledge in the rock garden should fulfil its requirements.

and round, of a delicate pink shade, marked with a distinct powdery white eye.

*P. x BERNINÆ*.—Conditions suitable to *P. hirsuta* apply also to this natural hybrid, between *hirsuta* and *viscosa*. From the former parent it takes its dense, low, tufted habit, with a taller flower-stalk of the latter. The flowers are deep pink, inclined to be purplish in fact, and are freely produced in May. It is rare in nature, even more so in cultivation.

*P. AURICULA BAUHINI*.—This form of *P. auricula* is no doubt very close to *P. a. albo-marginata* and *P. a. albo-cincta*; in fact, all three items may be regarded as the same plant from appearance. It is, however, a handsome plant, of easy culture, requiring very ordinary treatment. A cool situation in a good turfy loam should suffice to grow it well. The leaves, stout in texture, are wrapped in white meal, this being particularly heavy on their margins, giving the whole plant a most distinct appearance. Deep golden, white-eyed blossoms form heads on 3in. powdered, erect stems, and are heavily fragrant; these are at their best about May.

*P. A. OLD RED DUSTY MILLER*.—For more than a century has this fine old garden variety been in cultivation, but now its supply is scarce, except in one or two cases, where old-world plants are specially cared for. Outside the trade, old cottage gardens are the most likely places to find it and these are few and far between. Its large farina-covered leaves are always attractive, probably more so in the early days of spring when the tight winter buds unfold themselves. A mealy flowerstalk carries a head of quaint brick red blossoms 4ins. high in May. Cultural details as for the preceding item will be found satisfactory, and in cases where an alpine house is at hand specimens of these mealy auriculas should certainly be included where their beauty may be seen to the best advantage.

F. BARKER.



# ABOUT GARDEN PAVING

A DESCRIPTIVE ARTICLE ON THE USE AND MISUSE OF GARDEN PAVING. THE MATERIALS USED IN GARDEN PAVING AND THE DESIGN TO BE FOLLOWED ARE USUALLY MATTERS OF CONSIDERABLE DIFFICULTY FOR THE ORDINARY GARDENER.

THERE seems to be a constant difference of opinion among garden owners as to whether garden paths should be paved, and one does meet, on the one hand, people who will have nothing but paved walks, and, on the other, those who have no use whatever for paving of any kind in the

only be observed in comfort if we have a means of approach which will keep us dry under foot. So far, however, paving has no advantage over good gravel, and there are positions where, from the point of view of strict utility, it is decidedly inferior. Stone paving, in particular, withstands heavy traffic—particularly wheeled traffic—much worse than gravel, and there are places where, even from the standpoint of appearance, a firm-setting, nice-coloured gravel has superior attractions, warmth of colour being one of them. Brick paving is (or should be) warm in colour, but it cannot altogether supersede gravel, because it is only attractive when used in comparatively narrow strips or ribbons. A considerable stretch of brick paving is, however ingenious its arrangement, a paved yard and nothing more.

Mown greensward forms the best of all possible settings for dwarf roses and the generality of flowering shrubs and herbaceous plants, and no one with any sense of the fitness of things would let anything that might be called paving approach the wild or woodland garden. From the viewpoint of utility, however, turf will not withstand very hard wear, and it should not, as a rule, be used for paths in town gardens—at any rate not for through-paths which carry an appreciable amount of traffic. Wheeling materials over a turf walk in winter means the use of planks, or irreparable damage to the path. These drawbacks are, in addition to the fact that it holds moisture after rain and is, at some seasons, scarcely ever free from dew. Turf may, however, be used as a setting and yet leave a dry, wear-resisting pathway, by running a strip of paving down the centre of a broad walk between the flowers (Fig. 1).

Herbaceous plants and dwarf shrubs with flowers in tones and tints of purple in any stage of dilution, as well as those with crimson, soft yellow, or cool pink flowers, or with silvery or silver-grey foliage suit well with the brownish or purplish grey of self-faced York paving, and the paving has, in this case, the additional advantage of allowing dwarf plants of prostrate or spreading growth to tumble gracefully upon it and display their charms without fear of their getting mud-splashed or weed-infested.

Where there is no space for a paved garden for plants such as these, or where the cost would be prohibitive, it is permissible to set out the usual grass walk and to edge for a couple of feet either side with the paving. Or the character of the garden may be modified somewhat, and cobblestones (petrified kidneys), old bricks, crazy paving and what-not may be pressed into service to produce a Dutch-garden

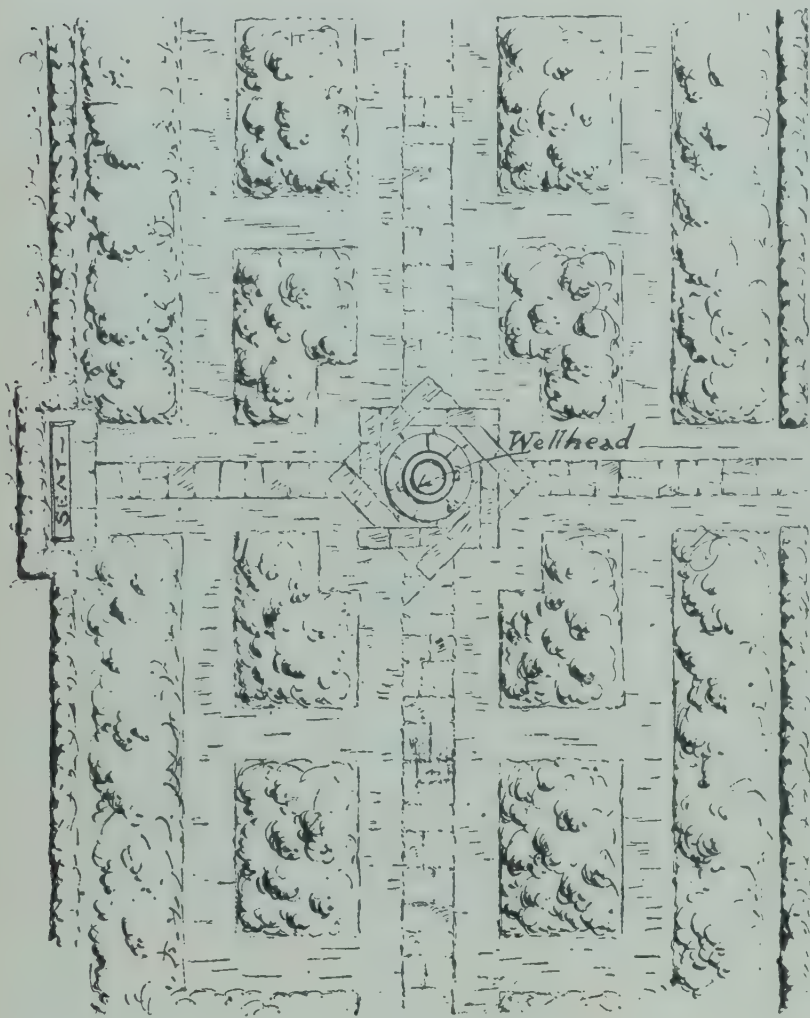


FIGURE 1.

garden. Fashions come and go, and the prevailing fancy for ill-laid "crazy" paving is but too likely, in the end, to drive paving of every shape and form from the gardens of those who must always do what is "being done." That there are fashions in gardening none will deny, but, fortunately, the really keen gardener is above fashion's whims; he builds his garden to suit his personality and in the end, and if the personality is great enough, he may even set a fashion himself.

The "personality" of a garden is a great thing, and there is something about even the faulty construction of a garden designed entirely by its plant-loving owner which makes a very real appeal to the hearts of other genuine garden lovers—an appeal which many professionally designed gardens, though infinitely better proportioned, fail to make. It is not easy for us garden architects to admit as much, but the fact has to be faced. It is only when the gardener himself has the gift of design, or when he has that appreciation of his own deficiencies which drives him to seek the collaboration of a designer that we get those outstanding gardens which give delight both to artist and plantsman.

We are in danger, however, of straying from our immediate topic. Let us look at this question of paving simply from the points of view of beauty and utility, leaving fashionable prejudice quite aside, and try to make up our minds where paving is desirable and where permissible, and under what circumstances it is entirely out of place.

From the point of view of utility, properly laid paving provides a dry way and enables one to admire a garden or to traverse it for any purpose dryshod, while the raindrops still hang on the foliage. "The dew that on the violet lies" can

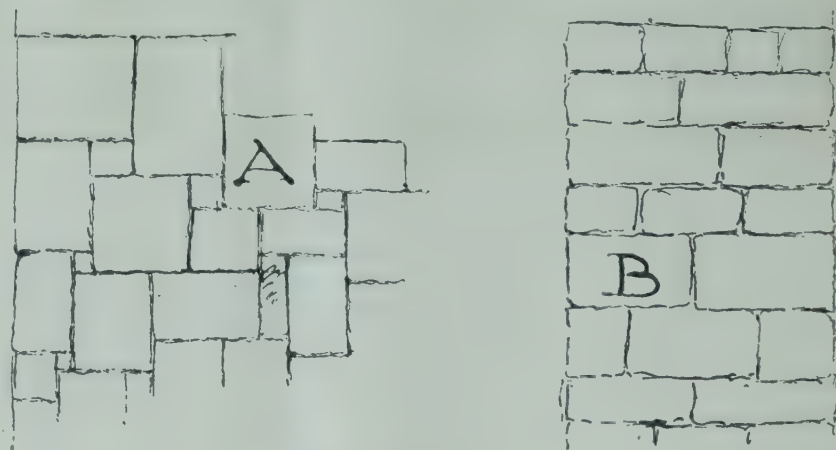


FIGURE 2.

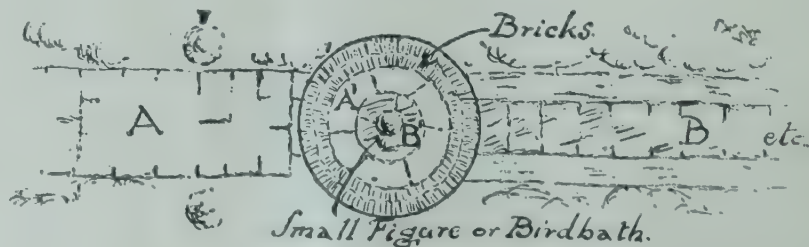


FIGURE 3



effect, but care should be taken to make adequate pathways for actual progress; cobble-stones are *not* comfortable to walk upon.

Squared paving is, as a rule, desirable for garden paths and terraces, but crazy paving, if carefully and closely jointed and well bedded, forms unexceptionable footways, which are only less effective than those composed of squared materials. Where extensive areas are to be covered it may often be used very effectively in conjunction with squared paving (or squared paving and bricks), and the effect is sometimes better than if all squared stone has been used.

In more or less formal places—under pergolas, in the open spaces of the paved garden, on important terraces, and so on—a certain amount of design in the paving is admissible or even desirable, but the fascination of those complexities must not tempt us to make our paving too elaborate. Unless on quite a small scale in a little Dutch winter-and-early-spring garden, very elaborate pavements bring back unpleasant

employed if stone comes within the range of practical politics, yet, if properly laid, it is hard wearing and, for positions where stone seems called for, better than gravel. People who must have impervious paths and cannot (or will not) afford stone, should certainly use it in preference to asphalt, which, in a garden, is an abomination. Bricks new or old of good red colouring and which will withstand frost when lying in damp earth form a good paving for narrow paths in old-fashioned gardens, and, in combination with other kinds of paving are useful in larger spaces. Roofing tiles on edge—otherwise useless old tiles from a crooked and dismantled roof will do—are often used as effective incidents in paving, and cobble-stones come in for the same purpose.

When squared stone is ordered from the quarry or agent, exact dimensions of the work should be given, with dimensioned drawings showing any patterning and instructions as to whether the stone is wanted in courses ("coursed random"), or otherwise ("random"). Fig. 2 shows the difference between the two



A PLEASANT COMBINATION OF BRICK AND TILE.



DOUBLE COURSED SELF FACED PAVING WITH GRASS EDGES.

recollections of parterres in coloured earths and other barbarous and outdated styles.

Almost all stones other than York self-faced, which is laminated and splits pretty much like roofing slate, must be sawn to get a reasonably smooth tread. Such sawn pavings are to be obtained in various parts of Britain in brown, various greys, purplish blue and red. Self-faced York is certainly the most beautiful stone for garden paving, as it displays a beauty of texture quite impossible with any sawn stone. It is usually sold in 1½ in. and 2 in. thicknesses (approximate, of course), and care should be taken to order the whole of the stone required for a particular job at once, otherwise the two or more lots may vary greatly in colour and the total effect be anything but charming. For this reason it is sometimes wise, where a paved path is being laid down to join a stretch of paving already in existence to insert some little feature in the paving at or about the junction, introducing other materials to mark the dissimilarity (Fig. 3).

Concrete is sometimes used for paving instead of stone. It is not a material to enthuse over, and should not be

styles. Crazy paving must, of course, be fitted and worked-up on the site.

Paving should always be laid on a layer of really fine material—sand or ashes, or lime—or cement mortar. Small paving, tiles, bricks, etc., should be set in mortar and the smaller pieces of crazy paving should certainly be bedded in mortar. It is in any case useless to lay paving direct on to ground which is liable to be flooded or to move when soddened. In bad cases a layer of concrete may be necessary as a foundation.

The question of paving is very much bound up with that of garden stairways and, where water is to be treated formally, with pond-edgings, and these three features should be considered together.

In certain positions the question of arrangement of paving should be given careful consideration. Care should be taken to avoid discrepancy of line when the general design is being laid out. In the case of laying out of paths such discrepancy of line is often noticeable, and it is afterwards realised that a different arrangement would have been preferable in the position.

R. V. G. WOOLLEY.



# THE VALUE OF HUMUS

BY E. HANNAFORD RICHARDS,  
*Rothamsted Experimental Station.*

**A**LTHOUGH the real nature of that important constituent of fertile soil, commonly known as "humus," is still the subject of discussion by agricultural chemists, there is no difference of opinion as to the value of organic matter in maintaining a high level of crop production. Whatever the scientific experts may say, the practical gardener knows this fact so well that it is quite unnecessary to go into the reasons here. In the present article it is proposed to deal with the different ways by which organic matter can be added to the soil, to discuss the advantages and disadvantages of each method and to show how the best value can be obtained in different circumstances.

First of all comes farmyard or stable manure, the oldest of all fertilisers, so aptly called by Kipling "the brown mother of all things." When this is of good quality it is the best of all ways of adding organic matter to the soil, since, besides providing the raw material of humus in the most suitable form, dung is also a "complete" manure. Its proportion of phosphate is low compared with nitrogen and potash, but this lack of balance is, of course, easily remedied by dressings of phosphatic manure. Unfortunately, much of the stable manure from towns is now very poor stuff, containing much rubbish of no fertilising value and, occasionally, oil waste and other things actually injurious to plant life. Further, dung often introduces weeds into a garden which were not previously found there. The greatest trouble about farmyard manure is that there is not nearly enough of it, and, consequently, it is expensive. The substitution of mechanical for horse traction has reduced the amount produced in towns, but even in purely agricultural areas it is not always easy for the gardener to get what he requires.

The farmer frequently gets over a shortage of organic matter in his soil by sowing a quick-growing crop, such as mustard, and ploughing this in when it has made a vigorous growth. The leaves and stems rot in the soil and so increase the supply of humus. There are several difficulties which limit this practice on farms, and these apply with even greater force to the smaller area of the garden, viz., the time required to grow the green crop and its dependence on suitable weather conditions to produce a satisfactory bulk. In spite of these objections, green manuring is used to some extent in gardens and most of the leading seedsmen supply special seed mixtures for this purpose. As will be explained later, the crop takes some time to decay after digging in, especially on the heavier soils, so that this method should not be used in cases where a short well rotted manure is known to give the best results with the following crop.

A third means of supplying organic matter is to buy in shoddy or one of the

many prepared organic manures now on the market. Not all of these are of equal value, but there are several reliable brands which may be used with confidence. Manures of this class have the advantage of simple and easy application, but, as they must be used liberally if they are to have any physical effect on the soil, the cost, including carriage, becomes rather heavy.

Finally, we come to the preparation of synthetic or manufactured farmyard manure, by arranging a controlled fermentation or rotting of vegetable matter so as to produce an organic fertiliser having the virtues of farmyard manure without the few disadvantages referred to above. This method is at once the oldest and the newest of those employed by the experienced gardener; oldest, because from the earliest times a compost heap in which grass cuttings, leaves, etc., were allowed to rot down has been a feature of every well managed garden; newest, because it is only within the last two years that the complex biochemical changes associated with the decay of cellulosic matter have been explored to a stage which allows them to be controlled so as to yield a product superior in some respects to good farmyard manure. Every garden produces cellulosic material, the potential source of soil humus. Much of this is usually burnt, but it is obviously wasteful to destroy what nature provides gratuitously, and to buy in dung or organic manures until the waste vegetable matter on the spot has been used to the best advantage.

As a result of researches carried out at Rothamsted Experimental Station it is now known that the micro-organisms concerned in the breakdown of the carbohydrates, which constitute at least 80 per cent. of the dry weight of most plant tissues, can be stimulated by certain chemical compounds. Further, there is a definite quantitative relationship between the weight of chemicals required and the fermentation of a given weight of cellulosic matter. The term "cellulosic" includes all carbohydrates normally found in plant tissue, *i.e.*, sugars, pentosans, starches, besides the different varieties of cellulose. These are given in the order in which they are most easily fermented: sugars in a few hours; ligno-cellulose, or woody fibre, in its most resistant form, will require several months. Nitrogen is by far the most important element concerned in cellulosic fermentation. Some kinds of garden refuse contain sufficient nitrogen but are lacking in some other essential constituents, *e.g.*, phosphate. By suitably adjusting the proportions of different types of waste vegetable matter, it is theoretically possible to balance the foods required by the organisms. In practice a compromise must be made suitable to the average kinds of garden refuse.

There is one very important fact to be remembered. If the special requirements of the organisms concerned are

not met by the supply of sufficient chemical stimulants in suitable form and, consequently, unfermented carbohydrate is dug into the soil, the microbes will draw on the reserves of plant food in the soil to complete the work not performed in the manure heap. As an example, if raw straw is dug into a fertile soil, the first crops taken will be less than those from untreated soil. Carefully controlled experiments on farm lands have shown that even a liberal application of complete artificial manures did not redress the balance. Of course, this effect is most pronounced with soils in poor condition, but it is always preferable to rot cellulosic material in the heap, until, at any rate, the sugars, pentosans and starches have disappeared, rather than to dig in the rubbish straight away, if a rapid turn-over of soil capital is desired.

Most of the knowledge briefly summarised above has been obtained in the course of study of the fermentation of animal manure, leading to the production of synthetic, or manufactured, farmyard manure from straw and other cellulosic materials. For more than eleven years, Lord Elveden has provided funds to maintain a research chemist at Rothamsted. Many of the early field trials, including the first successful production of synthetic manure from straw at a price comparable with farmyard manure, were carried out on Lord Elveden's estate at Pyrford, Surrey. These farm trials, and the whole of the elaborate series of experiments with garden refuse, were made by Mr. W. Auton, who has charge of the Pyrford Court gardens, and the successful outcome is very largely due to his skill and special knowledge. In 1921, when the laboratory work and small scale experiments had shown encouraging results, Lord Elveden formed a private company, originally known as Agricultural Developments Company (Pyrford), Limited, to carry the work to the commercial scale. This involved a heavy expenditure on staff and plant, which is outside the scope of a research institution. The capital of the company is provided by Lord Elveden, and any profit after payment of expenses will be devoted to further research on the lines which have proved so successful in the past.

The company (now known as Adco, Limited), owns the British and foreign patents for processes for preparing synthetic farmyard manure and for the special chemical reagents manufactured and sold by the company under its trade mark "Adco." These have been very widely used both at home and overseas for the treatment of a great variety of waste vegetable matter. Besides garden refuse of all kinds, straw, rushes, bracken and spoilt hay have been turned into manure during 1924. Overseas, the "Adco" process appears to have a future in tropical agriculture. "Adco" manure is now under trial in India,



Australia, Brazil, the Gold Coast and elsewhere, for the cultivation of tea, coffee, cocoa, sugar and bananas, to mention some of the more familiar crops. In Rhodesia both maize stalks and veldt grass have been made into very good manure which is now being tested against farmyard manure on potatoes.

For obvious reasons it is difficult to give definite figures for increases of crops grown in the ordinary garden. A plot trial made by Dr. F. Haviland,

St. Leonards, with "Adco" manure made from bracken, showed increased yields from 5 to 20 per cent. greater than from corresponding plots dressed with equal quantities of dung. Messrs. Sutton and Sons made a careful test on their trial grounds at Reading last year with "Adco" manure made from straw, and have kindly given permission for their report to be published. Copies are available to any readers who are interested. In conclusion, it may be noted that

while synthetic farmyard manure is not likely to be of interest to those gardeners who are fortunate enough to obtain ample supplies of stable manure at a cost of less than 10s. a load, nor to those who have to buy raw material in the form of straw at its present high price, the "Adco" method of dealing with garden rubbish that would otherwise be burnt, fills a place in the economy of the soil which is likely to prove of increasing value in the future.

## SPRING AT VINCENT SQUARE

ON the occasion of the fortnightly meeting of the Royal Horticultural Society at Vincent Square, Westminster, held on the 24th and 25th ult., the fact that Miss Spring had really and truly made her bow to 1925 was clearly manifest by the bright and gay appearance which met the eye on entering the hall. Alpines were present in large variety, while bulbs in the shape of narcissi and tulips, largely predominated. Carnations were also well to the fore, while orchids and greenhouse plants added their quota to the general effect of colour and fragrance.

One of the main features in the Show was the magnificent carpet of double tulips exhibited by Messrs. Sutton and Sons, Reading. The kaleidoscopic effect obtained by judicious planting of varieties with contrasting colours was truly wonderful. For bedding purposes these double tulips are excellent with their large flowers in all shades, borne on short, erect and rigid stems which are remarkably even in height. There can be no doubt, however, that the mere possession of double flowers detracts in some measure from their more extensive popularity. Such varieties as Mr. Van Tubergen, Helenium (yellow), Lucretia, Peach Blossom, Apple Blossom, Orange Nassau, Lord Beaconsfield (pink) were all eminently displayed.

The stand of Mr. Elisha J. Hicks attracted considerable attention, which it well merited. The roses which were exhibited were truly wonderful productions considering the time of year. They all showed the result of clean and careful cultivation throughout the winter months, the foliage being in good condition, while the number of flowers and their colours were remarkable. Climbing Lady Hillingdon was the most prominent, and was closely followed by other varieties, such as Betty Uprichard, Mrs. Elisha Hicks (which is very fragrant), Mme. Butterfly, America and Rosa Moyesii, which was of a good colour for this time. Mr. Hicks is to be congratulated on the results he has attained under such trying climatic conditions.

Messrs. Bath, Limited, proved by their exhibit at the hall this week that they are capable of growing excellent Darwin and May-flowering tulips in bowls of fibre as well as the narcissi and hyacinths which were so much admired at the last two shows. The decorative value of bowls of tulips could be well appreciated from these well grown tall specimens of most entrancing colours. The carmines, scarlet crimsons

and some of the yellows are particularly effective for indoor decoration. The well formed brilliant rose flowers of Pride of



NARCISSUS GODREVY, WHICH GAINED AN AWARD OF MERIT.

Haarlem, the shaded mauve of Feu Brilliant, Princess Elizabeth (light carmine) and Petrus Hondius (a rich rose) were some of the best. Long in stem and sturdy in growth was Batigon, a fiery red tulip. There are no pure whites among the Darwins, but the nearest is White Queen, which Messrs. Bath were exhibiting. This variety is slightly shaded with mauve and is hardly worth growing when such beautiful varieties as Inglescombe Yellow (perfect in clearness and form), Suzon (a delicate buff rose almost white at the base) and Eclipse (a crimson) are obtainable. Zulu and Philip de Commines (both handsome purplish black tulips) and Bronze Queen formed a contrast to the other shades. All of these could be seen on Messrs. Bath's stand, and some of them should be added to next season's collection. The average grower when purchasing

bulbs should consider the constitution as well as such points as colour, form and texture of the particular variety he contemplates

buying. Certain varieties may appear perfect when exhibited, but in some cases they will be found to be not good doers. They produce poor weak growths, do not increase rapidly, and are not successful in all soils. One firm who realises the importance of constitution when raising new varieties is Messrs. J. R. Pearson and Sons, Limited. They were exhibiting again this week some of their own narcissi and a number of varieties introduced by other specialists. Among them were members of the white trumpet narcissi, giant Leedsii, jonquilla and poeticus sections. One of the outstanding varieties was Firetail, a large-flowered Barrii narcissus with creamy white broad segments and a flat reddish orange cup. Other good varieties were Capella (a pale giant Leedsii), Van Waveren's Giant (a large trumpet narcissus), Hon. Mrs. J. L. Francklin (a vigorous trumpet variety with upright stem), The Don (a pale bicolor daffodil), Ben Alder (a good yellow), Bernardino (a bicolor incomparabilis) and Princess Miriam.

An excellent display of seedling narcissi under numbers and certain named varieties were again shown by Messrs. Barr and Sons. One looks forward to the time when these seedlings will be named and obtainable in commerce. Fantin Latour (a trumpet daffodil of great size with a lemon perianth and a deeper yellow trumpet), Sanda (a large jonquil hybrid of rich yellow), Watteau (of distinct colouring having its long narrow trumpet tinged with pink) were three of the named seedlings. Almost a self-colour

daffodil was Princess Juliana, and White Nile, Cræsus and Mrs. Mackinnon are representative of the varieties exhibited by Messrs. Barr and Sons.

Messrs. Dobbie and Co., Limited, had a striking display consisting entirely of poetaz narcissi. All varieties of these were massed down one side of the hall. Poetaz narcissi are hybrids between the best forms of polyanthus narcissi and poeticus ornatus. They are all vigorous in growth and some carry as many as six flowers on each stem. These poetaz narcissi are equally suitable for growing in bowls or massing in borders. They are very sweetly scented and last for some days as cut flowers. Joconde was one of the best varieties, although not so large as some. It is a clear yellow with a golden yellow cup. Hæmon was of similar colour but a little deeper. The scarlet-edged cup added to



the attraction of the variety *Admiration*. A large white with a yellow cup was *Alsace*, and among the other varieties exhibited were *Sovereign*, *Laurens Koster* (a small flower almost white), *Triumph*, *Irene* (a yellow) and *Grace Forbes* (a pure white with a bright orange cup).

Another first-class exhibit of narcissi was that of Mr. J. Lionel Richardson of Waterford, Ireland, who had a good collection of well grown varieties. Although not one of the newest narcissi on this stand, the aptly named variety *Sunrise* was one of the most effective. The semi-transparent perianth is tinged with orange at the base, and the cup is of a rich orange red. *Silvo*, a pale giant trumpet, was also noticeable. The good qualities of *Fantin Latour* and *Firetail* were again impressed upon the public by this grower. Mr. Richardson was showing *Golden Pedestal*, a variety of his own raising and one of the finest incomparabilis on the market, being perfect in form and colour. The flowers are of exceptional size and of a beautiful golden yellow. Unfortunately, this variety is very rare and expensive. *Glorious* (a splendid poetaz narcissus), *Empire* and *Queen of the North* are three of the many good varieties exhibited by Mr. J. L. Richardson.

The alpine were, on the whole, more varied than at the last show. Mr. Mark Fenwick exhibited an interesting and diverse collection which included a very beautiful seedling of *Narcissus triandrus*, pure white with slightly reflexed petals and wide, crinkled cup; *Tulip Kolpakovskiana*; a delicate lilac-blue squill from Messina (*Scilla Messinensis*); the rare *Primula Marven* (*Primula marginata* × *venusta*), violet-purple with a white eye; the little pale yellow *rhododendron R. flavidum*; and a good bush of *Daphne retusa*, a stocky evergreen daphne from China with heads of large lilac-pink flowers which promises to be happier in cultivation than many of its family. It appeared in several other exhibits, and should prove a valuable shrub for the rock garden. All the plants were remarkably well grown. Broad pans of *Saxifraga Faldonside* were nearly hidden in almost morbid floriferousness by the great yellow blossoms, and even the uncertain *Saxifraga Boydii* (*S. Burseriana* × *aretoides*) was flowering heartily.

Mr. Clarence Elliott showed several rare and interesting plants on a series of terraces built up of grey limestone which showed off admirably the magenta fur of *Saxifraga Griesbachii* Wisley variety (more vigorous than the type and even more fantastic in the pose of its tilted rosettes) and the cherry red of Farrer's *Saxifraga Myra*. *Primula Allionii*, that rarity of the Maritime Alps, looked happy enough hiding its neat rosette with large pink flowers in spite of its reputation for difficulty. Another very attractive rarity was the diminutive Scots pine, *Pinus beuvronensis*, which is one of the few dwarf conifers that reproduces the forest form in miniature. With *Cupressus obtusa tetragona minima* a 3in. mound of mossy green shown by the raiser, Mr. W. H. Rogers of Southampton,

and *Daphne petraea* it makes an admirable combination of minute shrubs for the miniature rock garden. Another unusual plant shown by Mr. Clarence Elliott was *Dentaria polyphylla*, a woodland crucifer with creamy yellow flowers and ferny leaves which has far more grace and distinction than most of its race.

Messrs. Tucker of Oxford showed several plants of *Daphne retusa*, a pan of *Androsace pyrenaica* (like lumps of grey-green rock studded with minute jasmine flowers), the large-flowered form of *Ranunculus amplexicaulis* (a statuesque beauty) and—very different from these high alpine—the old-fashioned double primrose, *sanguinea plena*, which is not in the least blood red but of a cheerful claret colour that goes very well with the old double white. With several other exhibitors they showed the graceful little *Hyacinthus amethystinus*, which also belies its name, for it is a clear Cambridge blue and rather like *Muscari Heavenly Blue*, with the bells open instead of closed and a lighter, airier design. It was probably named from dried specimens, which are apt to become purple with age and might be called "amethystine."

Among the other exhibitors were the following:

**ANEMONES.**—Messrs. Reamsbottom and Co. and R. Gill.

**AZALEAS.**—Messrs. R. G. Cuthbert.

**CARNATIONS.**—Messrs. Allwood Brothers, C. Engelmann, and Stuart Low and Co.

**CINERARIAS.**—Messrs. Sutton and Sons.

**FORCED SHRUBS.**—Messrs. L. R. Russell.

**FRUIT.**—Messrs. Bunyard, and Westmacott and Co., Limited.

**ORCHIDS.**—Messrs. Sanders and Stuart Low and Co.

**POLYANTHUS.**—Messrs. Blackmore and Langdon, R. Gill, K. and E. Hopkins, G. A. Miller, Arthur Pratt and Sheppards.

**RHODODENDRONS.**—Messrs. R. Gill and Son and G. Reuthe.

**ROSES.**—Mr. George Prince.

**SHRUBS AND ALPINES.**—Messrs. Bakers, Carter Page, William Cutbush, M. Prichard, G. Reuthe, Skelton and Kirby, G. A. Miller, Waterers, and G. Whitelegg.

**VIOLETS.**—Mr. Baldwin Pinney.

## NEW AND RARE PLANTS.

**PRIMULA BUNTY.**—This variety merited the considerable attention it evoked, since it may be regarded as a distinct break in colour in the *primula* genus. The flowers were from 3in. to 1in. across and varied in colour from dark blue to purple. In a few flowers the purple tinging was round the eye. The stems were short so that the flowers arising from close and compact rosettes of leaves sat fairly tight on the plant. Award of merit. Shown by Messrs. Bakers, Wolverhampton.

**RHODODENDRON BERNARD GILL AND R. FIREBALL.**—These two *rhododendron* hybrids appeared to be remarkably close both in colour and habit. The flowers in each case

were borne in light and compact trusses close to the foliage. The leaves varied from 3-4ins. in length. Award of merit. Shown by Messrs. Gill and Son, Falmouth.

**TULIP HELLENUM.**—A double-flowered variety with large flowers of a bright yellow in colour. When fully expanded the flowers measured 5-6ins. across. These were borne perfectly on stems which varied slightly in height from 14-16ins. For bedding purposes it should prove a good variety. Award of merit. Shown by Messrs. Sutton and Sons, Reading.

**NARCISSUS WHITEHILL.**—This is a trumpet variety with large flowers almost pale white in colour. The trumpet was prettily crisped at the edges. Award of merit by Narcissus Committee. Shown by Mr. J. L. Richardson, Prospect Gardens, Waterford.

**N. ST. WINNOW.**—This variety was a large trumpet daffodil with the flowers well carried on long stems. The perianth was pale white in colour and almost transparent. The trumpet was crisped at the edges.

**N. MILKMAID.**—A pretty Leedsii variety. The short white tinged with yellow trumpet was characteristically frilled. The segments were whitish yellow in colour.

**N. DOMINICK.**—A large yellow variety with wide open trumpet with frilled edges.

**N. GODREY.**—A magnificent large yellow trumpet variety. The segments were of good substance and deep yellow in colour. The trumpet was crisped and frilled, and measured about 1½ins. across.

**N. DAMSON.**—A variety with white to yellowish perianth which contrasted well with the scarlet to orange cup, which was crisped and frilled.

**N. BODELLY.**—This variety carried large flowers with white segments and yellow trumpets. The trumpets were rather rigid and stood boldly out from the surrounding perianth. The above six varieties were all exhibited by Mr. P. D. Williams, Lanarth, St. Keverne, and each gained an award of merit by the Narcissus Committee.

## ORCHIDS.

**ODONTIODA VISCOUNTESS FOLKESTONE** (*Odontioda Coronation* × *Odontoglossum l'Empereur*).—Although this young seedling was flowering for the first time, and with only a single flower, it exhibited such promising characters that the Orchid Committee recommended a preliminary commendation. The flower is equal in size to some of the best *odontoglossums*, the segments are particularly well formed, of deep violet rose colour, the central areas with chocolate-coloured blotches, the elongated labellum rendered attractive by reason of the bright yellow spiny crest. One of the finest of the many hybrids that have been raised from *Odontioda Coronation*. Shown by Mr. R. Gerrish, Milford Manor, Salisbury.

In order to prevent confusion with another hybrid of similar name, the plant given an award of merit on February 24th as *Laelio-Cattleya Sheila* has had its name amended to *Laelio-Cattleya Sheila Beddington*.

# SERVICE FOR READERS

Though so many subjects are dealt with in each issue of *THE GARDEN*, it must constantly happen that readers seek information which is not immediately available. In such circumstances they should make use of our new Service Department. Through its medium each reader's own particular enquiry can be dealt with. No matter what the question is, whether advice is sought as to—

RESTOCKING A GARDEN, COLOUR SCHEMES FOR GARDENS, THE BEST PLANTS FOR CERTAIN SITUATIONS, WHERE TO OBTAIN NEW AND RARE PLANTS, INSECT PESTS, NAMING OF PLANTS, AND THE HUNDRED AND ONE OTHER DETAILS RELATING TO THE GARDEN—

there is always information available from a staff of expert contributors and consultants; and there is no charge for this. It is one of the additional means of Service which *THE GARDEN* is glad to render to its readers.

Also, there is the further convenience which the Service Department affords of supplying readers with data about anything that is advertised in the pages of the paper. Thus, on receipt of an enquiry, particulars will be sent of, say, half a dozen things about which the reader seeks information. The only stipulation is that a stamped addressed envelope shall be sent with the enquiry.

All communications should be addressed to the Service Department, *THE GARDEN*, 20, Tavistock Street, Covent Garden, London, W.C.2.



# THE AMATEUR FLOWER SHOW

A FEW HINTS FOR INTENDING EXHIBITORS AT THE AMATEUR SHOW TO BE HELD BY THE ROYAL HORTICULTURAL SOCIETY ON JUNE 30 AND JULY 1.

FELLOWS of the Royal Horticultural Society and horticulturists generally will welcome the decision of the Council to hold a special show for amateurs at the Horticultural Hall, Vincent Square, at the end of June. The success of the venture will depend upon the support it receives.

A few notes on the various classes may be of interest to prospective exhibitors.

The rose rightly takes its place at the head of the schedule. The great army of rose enthusiasts should in itself be sufficient to guarantee the success of the rose classes, especially as the show comes right in the heart of the rose season. Where suitable varieties are grown and grown well, there is not a vast difference between the garden rose and the one good enough for show. If the idea should present itself that it may not be possible to get flowers large enough, it might be well to point out that it is quite possible to overdo size. Beyond a certain point, according to the variety, size may tend to coarseness, and would thus be less desirable than the bloom which is a little on the small side.

The first six classes are devoted to roses. The first two are for teas and hybrid teas, the third and fourth for ramblers, and the fifth and sixth for types other than those mentioned. In each class the blooms are to be shown in vases. Incidentally, I am not sorry there are no box classes. We shall thus, I hope, be spared the sight of the over-dressed rose, a common sight when shown in boxes. By exhibiting in vases the foliage plays a part which is almost lacking, of necessity, in box classes. One point suggests itself, those varieties with good long stems, granted equally good blooms, will at least more readily lend themselves for "setting-up" effectively, than the shorter stemmed ones.

At this date important factors which will lead to success are good healthy plants, growing in a satisfactory soil.

If the rose beds have not been given a dressing of lime for the last two years they should certainly be given a good sprinkling at once. Ground quick lime is best for strong loam and chalk for lighter soils. This is particularly necessary after the excessively wet winter.

As it is advisable to give a top-dressing of decayed manure immediately after pruning, no time should be lost in giving the lime as the two should not be given together. After an interval of a few weeks the top-dressing of farmyard manure should be given, together with a good sprinkling of bone meal, and lightly forked in.

Rose pruning, if not already completed, should be finished as soon as possible. To some extent the nature of the pruning will be governed by the variety and its condition at pruning time. For exhibition blooms fairly hard pruning is advisable. The growths should be shortened according to their strength, the smaller the shoot the harder should it be pruned. As new shoots develop, all weak ones should be removed, and every shoot retained should be considered capable of producing an exhibition flower. All flower buds except the terminal one must be carefully pinched off.

Records prove that we get, more often than not, very dry spells in May and early June. This is a most critical time for growth, and coincides with the ideal time for encouraging growth and

bud development. Should it be dry, applications of clear water should be alternated with weak manure water made from cow or horse manure and soot. Even in a season of normal rainfall, two or three manurial waterings will almost certainly be beneficial. Stirring the surface soil must also be considered essential.

Roses for the rambler class, at the end of June will be obtained principally from the multifloras and the early-flowering Wichuraianas. It will be too early for the late-flowering Wichuraianas of what one might term the Dorothy Perkins type. Assuming that the plants are well established, that they have strong, well ripened shoots capable of producing good trusses of bloom, the main point will be to provide them with frequent weak manure waterings during May and June and to keep down pests.

Classes 6 and 7 are for roses other than tea, hybrid tea or rambler. Three blooms of each variety.

If it is intended, as it appears to be, to admit any type other than those mentioned, the wording is not good. Some delightful species, such as Moyesii and Hugonis or Penzance hybrids would not look their best staged as single blooms, and dwarf polyanthas would not be admissible. It would appear then that hybrid perpetuals and Pernetianas would be the best types to show. These would in themselves make a charming exhibit. It would be as well if the Society gave a definite ruling on this point before it is too late.

Classes 7 and 8, for delphiniums, should prove very popular.

It will be interesting to see whether the more recent novelties will surpass such grand varieties as Millicent Blackmore, Sir Douglas Haig, The Alake, Statuaire Rude, King of Delphiniums, Harry Smetham, Lamartin, Nettie and Rev. E. Lascelles. Prize-winning spikes will probably be obtained from plants which have been established a year. The first essential detail will be the restriction of growths to not more than three or four or even fewer to a plant. The weaker ones should be removed when the shoots are about 6ins. high. Staking, watering and feeding are other points which must on no account be neglected. Each shoot must be carefully supported by a bamboo cane placed in position early and tied as necessary. Hollow-stemmed plants like the delphiniums are great absorbers of water and this should be given in abundance during May and June if at all necessary, and an occasional weak liquid manure watering. In addition some bone meal lightly forked around the plants in early spring will be valuable. The effect of this and the waterings will be to add size to the blooms and length to stem, and possibly to intensify the colour of the flowers.

Classes 9, 10 and 11 are for sweet peas.

These will come as a preliminary to the National Sweet Pea Society's Show a fortnight later. Those who made an early start by sowing the seeds last October should have no difficulty in getting plenty of flowers by the end of June. Sowings made early in the year in gentle heat should also be ready. Planting should take place as early in April as climatic and soil conditions will allow. Deep digging is essential and the soil must be enriched with well rotted manure. Lime is of great importance too, and the sweet pea is also a lover of potash and should

have it in some form. In the final preparation of the soil, artificial manures at the rate of 1 lb. of bone meal and 1 lb. of sulphate of potash may be given to every 20ft. run of row. The plants must have plenty of space, about a foot apart in a double row being usual. The weaker growers, such as the orange shades, should be allowed only one main shoot per plant, but the strong growing varieties can well support two or even three. Beyond one good watering to settle the soil it will be better to avoid this for some time, as it would only tend to keep the roots cold.

Dustings of soot may be necessary to ward off slugs. After a few weeks of apparent quietness, during which time the plants are rooting, if not making much growth, they will grow away rapidly if anything like genial weather prevails. Tying the shoots to their supports, pinching out all side growths and tendrils, confining the plants to the leading shoot only, will be work of almost daily importance. By the end of May the plants will have got well up the stakes and possibly have commenced to bloom. At this stage feeding should begin and can be given in the form of weak liquid manure waterings and soot. Cold water direct from taps should not be used owing to its chilling effect on the roots, and the danger of such a check must be avoided.

Sulphate of potash,  $\frac{1}{2}$  oz. to a gallon of water, may be given if the weather is very warm and trying to the plants, using this quantity to four plants. Under such conditions a mulching with short manure, lawn clippings or leaf-soil will help to conserve moisture. Blooms must be regularly gathered, or it may be decided to remove buds until wanted for show. Three weeks must be allowed for safety. If warm weather prevails, two weeks would be sufficient to allow, but such a risk should not be run. A good exhibition bloom should have a stem 12ins. to 15ins. long, with four well-coloured flowers, well placed on the stem.

Classes 12 and 13 are for gladioli.

It is fairly safe to say these fine flowers were never more popular than they are to-day. The charming primulinus hybrids are great favourites, especially for cutting. Whether they will play a big part in the above classes is, however, doubtful. Exhibitors will probably depend upon the larger-flowering types. The date of the show is a little early for gladioli, and it will be necessary to anticipate this and gain a month by starting the corms in pots and planting out later. Or they can, of course, be grown and flowered in pots. For planting out, potting should have been done as early in March as possible, and a fairly rich compost of loam, leaf-soil and decayed manure used. One corm will require a 5in. pot. The pots should now be in a cold frame, and watering should not be necessary till growth begins. Planting out may be done towards the end of April, by which time growth should be a foot high. Staking the spikes early is important. If the position is an exposed one some protection should be given just before blooms commence to open. Stirring the soil, keeping free from weeds, watering as necessary, and when flower spikes develop with some weak manure water, will constitute other cultural details.

ARTHUR J. COBB.

(To be continued.)



# GARDENING OF THE MONTH

## FLOWER GARDEN.

**ANNUALS AND BIENNIALS.**—Sow hardy kinds in open ground in reserve beds and mixed borders. Thin out as soon as ready. Prick out hardy annuals sown last month in reserve beds. Sow at end of the month half-hardy annuals which will not transplant. Sow seed of aquilegias, sweet williams and wallflowers on a warm border.

**ANTIRRHINUMS AND PENTSTEMONS.**—Plant out rooted cuttings which are now in cold frames.

**CALCEOLARIAS.**—Plant out at end of the month.

**CHRYSANTHEMUMS, BORDER.**—Plant out in firm rich soil.

**GLADIOLI.**—Plant in large clumps on rich, well drained soil.

**GRASSES, ORNAMENTAL.**—Sow seed now.

**HERBACEOUS BORDERS.**—Hoe, keep a watch for slugs. Place ashes round such plants as delphiniums. Fill up any gaps with annuals and biennials.

**HOLLYHOCKS.**—Prepare site by digging well. Plant out at end of the month.

**NYMPHÆAS.**—Plant now in baskets filled with turfy loam and leaf-soil.

**PANSIES AND VIOLAS.**—Plant out in permanent positions.

**PYRETHRUMS.**—Transplant single and double kinds now.

**ROSES.**—Prune Teas and Noisette roses. Finish pruning Hybrid Teas. Fork in a light dressing of manure. Mulch newly planted roses and roses on light hungry soils. Spray with nicotine wash to keep down aphids.

**SWEET PEAS.**—Plant out those in pots and boxes. Stake well before planting. Sow seed on prepared ground. Protect young plants from cutting winds with spruce branches. Tie up young growths and protect from slugs.

**VIOLETS.**—Break up old clumps after flowering. Plant out in lines on well dug ground. Water and syringe if weather warm. Plant out violet cuttings rooted in frames.

**LAWNS.**—Mow weekly. Weed, and apply lawn sand.

**FRAMES.**—Start another batch of bedding begonias. Propagate perennials by inserting basal cuttings in sandy compost in frames. Prick off annuals sown in frames last month.

## HARDY FRUIT.

**APPLES AND PEARS.**—Spray with nicotine wash just before flowers open, and with lead arsenate when they have set, to keep down attacks of codlin moth, March moth and apple-blossom weevil. Guard against pear midge. Apply methylated spirit with stiff paint brush to portions attacked with American blight.

**APRICOTS.**—Spray with Katakilla or good insecticide. Protect when flowering.

**BLACKBERRIES.**—Train on trellis or fence.

**BLACK CURRANTS.**—Spray with soft soap solution and quassia extract to check big bud.

**CHERRIES AND PLUMS.**—Syringe with quassia extract to prevent an attack of aphids. Give a light dusting of lime.

**GOOSEBERRIES.**—Examine for caterpillars. Hand pick or spray. Do not use lead arsenate.

**GRAFTING.**—Proceed with operation when sap rising. Graft cherries and plums first. Examine grafts done in March, fill up any cracks with grafting wax.

**PEACHES AND NECTARINES.**—Protect when flowering. Disbud shoots gradually. Guard against aphids and peach-leaf blister.

**RASPBERRIES.**—Hoe the ground and give a good mulch of manure.

**RED AND WHITE CURRANTS.**—Spray with paraffin emulsion to keep down currant moth.

**STRAWBERRIES.**—Hoe the bed. Give a dressing of artificials and soot and then a mulch of manure.

**WALL FRUIT.**—Protect from frost when in bloom. Syringe with insecticides after flowering, to keep down aphids. Water trees under copings.

## VEGETABLES.

**ASPARAGUS.**—Prick over the beds. Give a light dressing of nitrate of soda and, later, salt and soot. Prepare and make new beds. Plant young crowns, cover immediately with 4 ins. of soil. Sow seed in nursery beds.

**ARTICHOKES, GLOBE.**—Make new plantations on well trenched ground. Plant strong side suckers. Mulch with long litter when finished.

**BEEF.**—Sow globe beet on warm border. Do not select ground which has been recently manured.

**BROAD BEANS.**—Make a final sowing. Draw up soil round young plants and support the growths. Plant out those now in boxes. Watch for slugs.

**CABBAGE AND CAULIFLOWER.**—Prick out early sowings and make another sowing.

**CARROTS.**—Dust young seedlings with soot early in the morning. Hoe regularly. Make another sowing after dressing the ground with soot and wood ashes. Thin seedlings early.

**FRENCH BEANS.**—Sow a batch at the end of the month, and sow at the beginning of the month in frames.

**HERBS.**—Sow annual kinds. Divide and replant perennials.

**LETTUCE.**—Make sowings every fortnight and thin early, and transplant.

**LEeks AND ONIONS.**—Plant out those raised in heat after hardening off, select mild showery weather for the operation. Sow main crop.

**PEAS.**—Plant out soon those in boxes. Stake seedlings soon. Make sowings every fourteen days. Sow main-crop marrowfats.

**POTATOES.**—Finish planting. Protect early varieties as soon as they are through the ground by drawing up soil round the shoots.

**SEAKALE.**—Plant out root cuttings. When well started reduce growths to one strong one to form a good crown.

**SEED SOWING.**—Make sowings of Brussels sprouts, radishes, turnips, savoys, kohlrabi, kale, parsley, New Zealand spinach, spinach and scorzonera. Thin seedlings as soon as they are fit to handle, and hoe frequently between the lines. Sow cardoons and celeriac in a frame.

**SHALLOTS.**—Plant on good ground.

**FRAMES.**—Ventilate well carrots, lettuce, etc.

## SHRUBS.

**PRUNING.**—Clip ivy on houses and walls. Prune Buddleia Veitchiana, Ceanothus Gloire de Versailles and Hydrangea paniculata, if not already done.

**GENERAL.**—Hoe ground round newly planted trees and give them a light mulch. Rake and tidy shrubberies. Examine stakes and supports of shrubs.

## ROCK GARDEN.

**GENERAL.**—Pick off all dead leaves and flowers. Restrict large clumps of arabis, aubrietia, cerastium, vinca, etc. Lightly stir the soil in between the plants. Plant out alpine now in frames. Finish top-dressing.

**ANNUALS.**—Make sowings in patches.

## FLOWERS UNDER GLASS.

**ABUTILON EUPATORIUM, ETC.**—Re-pot old plants. Propagate by cuttings abutilon, cyrtus, etc.

**ANNUALS.**—Stake and tie pot plants. Prick off seedlings for flowering outside, place in frames at end of the month.

**BEDDING PLANTS.**—Pot off seedling begonias, petunias, verbenas, etc. Shift all possible kinds into frames at end of April,

and allow them to harden before planting outside. Remove specimen plants to cooler quarters.

**BEGONIAS.**—Pot up tuberous kinds as they start into growth.

**CAMELLIAS.**—Re-pot those which have not sufficient root room. Give weekly applications of liquid manure to young plants.

**CANNAS.**—Pot up as they start into growth; use 5 in. pots.

**CHRYSANTHEMUMS.**—Re-pot and, later, pinch the points.

**DAHLIAS.**—Place pots in frames at the end of April to harden.

**FORCED SHRUBS.**—Prune deutzias, prunus, lilacs, etc., after flowering, and plant outside in a rich border. Prune forsythia.

**FUCHSIAS.**—Pinch when growing well, but not at the time of potting.

**GREVILLEA ROBUSTA.**—Pot up seedlings.

**IVY GERANIUMS.**—Re-pot now.

**LILIUM AURATUM AND L. SPECIOSUM.**—Bring from the frames into house. Do not give too high a temperature.

**PERPETUAL CARNATIONS.**—Pot late-struck plants into 6 in. pots.

**PRIMULAS AND CINERARIAS.**—Sow seed in well drained pans.

**ZONAL PELARGONIUMS.**—Give another potting, and press soil very firmly.

**GENERAL.**—Give less heat as the days become warmer. Ventilate well, but guard against cold draughts. Prick off young seedlings and place on airy shelf near the glass. Harden off gradually plants which are to flower outside. Shade some plants if the sun is strong at the end of the month. Fumigate to keep down aphids.

## FRUITS AND VEGETABLES UNDER GLASS.

**APRICOTS.**—Disbud before the shoots are too long. Remove those on underside and back. Leave well placed extension shoots. Attend to watering and feeding.

**FIGS.**—Pinch out all weak growths. Pinch back laterals to four or five leaves. Water frequently and syringe twice daily.

**ORCHARD HOUSE.**—Pollinate the flowers. Give drier conditions when in bloom. Ventilate well, but avoid cold draughts. Fumigate when fruit has set and syringe twice a day.

**MELONS.**—Pollinate and maintain a drier atmosphere when fruit setting. Pinch out point one leaf beyond the fruit. Continue pinching, stopping and tying for more advanced plants. Start damping and syringing again when fruit has set. Water regularly and very carefully; do not allow any water to touch the stems of the plant.

**PEACHES AND NECTARINES.**—Disbud shoots and thin fruit. Do the work gradually. First remove ill placed and misshapen fruit and, later, any extra fruit. Give more air to peaches when stoning. Syringe forcibly to keep down red spider. If attacked, spray with liver of sulphur. Fumigate with nicotine to keep down aphids. Water whenever necessary and feed at intervals with liquid manure or Thomson's manure. Feed occasionally with guano.

**VINES.**—Continue stopping laterals and tying. Thin grapes gradually; do not handle bunch. After thinning, dress the borders with vine manure. Give higher temperature when muscats in bloom.

**CUCUMBERS.**—Tie up and stop growths. Syringe and damp down. Keep temperature high, ventilate very carefully.

**DWARF BEANS.**—Sow in boxes to form a succession.

**MARROWS.**—Make another sowing. Plant out young plants on a hot-bed.

**MUSHROOMS.**—Keep house moist and, if heated, lower the temperature. Prepare manure for beds outside.



# SIMPLE GARDENING

## ANTIRRHINUMS.

IT is possible to have blooms of these plants available ten months out of the year with the aid of a greenhouse and if the right varieties are grown. But the great majority of cultivators are satisfied if they obtain a nice display during the summer months. There are many lovers of these charming flowers who do not fully understand their treatment, and these notes may be helpful to such. The seeds should be sown in a frame or greenhouse during February. At this date all resultant seedlings should be about  $\frac{1}{2}$  in. high and possessing four small rough leaves. Readers who wish to purchase young plants from firms advertising in THE GARDEN should order them to be sent out early in May, then they can be kept on a bed of ashes in a sheltered position till early in June, when the general bedding-out work is done. The young plants, during May, will become gradually hardened, and this should be the treatment of home-raised stock. From March to May the tiny seedlings should be transplanted, either in boxes, or beds in frames, 3 ins. apart each way. Antirrhinums thrive in a medium-light compost in which some old mortar rubble has been mixed. Frame treatment is suitable and ensures stocky plants with judicious ventilation. The plants thrive in well drained soil and often fail in very wet ground. There are many lovely distinct colours which will please everyone, but the pink-flowered variety Nelrose should be included as it flowers a long time.

## SOWING GRASS SEEDS.

In some gardens it is necessary to sow a few grass seeds every year in spring or early autumn, because certain lawns become patchy owing to character of soil or situation. Then, of course, there are the small lawns to be constructed either from seeds or turves. The latter are not always available; the seeds are, and if the owner will take the trouble thoroughly to free the soil from the roots of coarse weeds, he may soon possess a perfect lawn as our seed firms now take great care in the preparation of their lawn grass seeds. Few lawns are quite level; large, undulating ones are charming; even medium-sized ones may be so made on a modified scale, but the quite small affair should be level, or nearly so. In the case of clayey subsoils the surface should be 3 ins. lower at one side or end, then water will not lodge on it. The soil should be well broken on the surface, raked and firmed while in a fairly dry state. Having done this work, very lightly mark out 1 yd. squares, and then sow the seeds pretty thickly, finishing one square before sowing seeds on another. In this way the whole lawn space will be evenly sown. It will not be difficult to procure sufficient fine soil just to cover the seeds on a small area, but on larger ones the seeds should be neatly raked in. In all cases some immediate rolling will be beneficial, and a

few strands of black cotton stretched across will keep off birds.

## DAHLIAS FROM CUTTINGS.

All tubers of dahlias that were placed in boxes or on stages and partly buried in a light compost several weeks ago will now furnish nice slips suitable for cuttings. The amateur may succeed with the cuttings either in a propagating frame or in a frame on a hot-bed. Of course, there is, during the first three or four weeks after construction, a constant dampness in the frame arising from the fermenting material and as the stems of the cuttings are very soft and fleshy, care must be taken to prevent loss through damping-off. Always leave a small opening at the top of the frame, then the rank steam will escape. From strong cuttings very sturdy plants may be grown, and these will bear excellent flowers. The cuttings root in three weeks



time and so there is every opportunity to grow them on in pots or boxes in a cold frame and have strong specimens to plant out early in June. I like to propagate several cuttings in a small pot, inserting them round the sides as shown in the sketch. The best compost is one made of loam and leaf-soil in equal proportions and plenty of coarse sand. The letter *a* shows the old stem; *b*, old tuber; *c* and *d* show where to cut off the stem below a joint and the two leaves; *e*, sand on the surface; *f*, sand at the base of the cutting; and *g*, the depth to plunge the pot in the bed. Very careful watering is necessary.

## TRANSPLANTING ONIONS AND LEEKS.

Small onion bulbs and rather thin leeks result when the seeds are sown in the open border late in March and during

the first half of April. The small onions keep well when harvested and stored, but many cultivators like to grow some big specimens and such can only be obtained by sowing seeds under glass early in the year and transplanting the resultant seedlings. Now, having cared for the latter during their early stages of growth, it is essential for success that very careful treatment be the rule when transplanting the young onions and leeks in their final quarters. Rich, firm ground is necessary, but the firmness must not be obtained by treading or rolling the soil while it is rather moist. Indeed, I do not advocate treading except in the case of very light soil, and the surface portion, even then, should be quite dry. Heavier soils will be firmed by the treading necessary when preparing them for the young plants. I am presuming that the soil has been well manured at digging time. If not, in the case of leeks, trenches quite 2 ft. deep and 18 ins. wide should be opened and rotted manure freely mixed with the soil as two-thirds of it is replaced. The trench will accommodate two rows of plants at 1 ft. to 16 ins. apart. The surface of the soil for the onions should be made black with soot, the latter lightly forked in and the onions planted 3 ins. apart in rows 14 ins. asunder. Every bit of fleshy root should be retained and planted straight down with the aid of a hand trowel. Only the roots should be buried.

## VENTILATION OF HOUSES.

During the spring months the correct ventilation of glass houses and frames is a very important matter. There is abundance of tender foliage now under glass. Outside, we often feel the cold, chilling east winds and do not like them. The young shoots, if unduly exposed to them, are checked and become, in some instances, stunted; then another evil befalls them—attacks by aphides, which live on their juices. If our greenhouses, fruit houses and frames are to be ventilated in a proper way, we must watch the weather conditions practically day and night. When cold winds prevail and, at the same time, the sun is very hot, it would be a mistake to keep a glass structure quite closed till, perhaps, the middle of the forenoon and then suddenly open wide the ventilators to lower the temperature, which may be approaching 100° Fahr. If, through unforeseen circumstances, houses are closed in this way, the ventilators should be opened a little only, and so that a cold current of air will not be admitted. A sprinkling of water on the floor will help matters, and the house should be closed early in the afternoon. Early in the morning admit a little air, and gradually increase it according to outside conditions. Where possible, in the case of frames as well as houses, admit air on the side opposite to that on which the wind blows. Cold draughts soon cause mildew on young vine and rose foliage under glass and should be guarded against. GEORGE GARNER.



# CORRESPONDENCE

## BLACK SPOT ON ROSES.

SIR,—As the outcome of a short article which appeared in *THE GARDEN* a few months ago regarding a remedy and palliative for that troublesome rose disease known as black spot, I have had many letters of enquiry as to the nature and strength of the mixture and manner of application. The preparation itself which we had found successful is a proprietary liquid called "Tarbol" (manufactured by The Chemical Union, Limited, Ipswich). At Oxted we find that satisfactory results are obtained when mixed and used in the following manner: A solution is prepared in the proportions of two tablespoonfuls of "Tarbol" to a three-gallon can of water. Immediately any signs of black spot make their appearance, as noted by the discoloration of the leaves, the plants are sprayed twice a week. If it is found that the disease has attacked the bud as a whole, the soil is drenched several times during the winter months, right up to pruning time, and so long as there is no new growth on the foliage a slightly stronger solution can be used with safety and advantage. Where the question of such a troublesome and

soil. I suggest that in this point may perhaps lie an explanation of some of the anomalies which have puzzled us. My own garden is upon the greensand with a depth of a good foot of sandy loam. On this soil I can grow ericaceous plants and rhododendrons, if plenty of water is given. A few hundred feet away, where the soil is only 2ft. or 3ft. deep before the rock is reached, this would be impossible. It seems, therefore, very probable that all the lime has been washed out of this deep soil, and as we are now told that rain, having passed through the first few feet of soil, never returns, there would be no danger of the lime being brought up from below.—E. A. BUNYARD, *Maidstone*.

## MINIATURE DAFFODILS.

SIR,—After reading the article on miniature daffodils by Mr. Edward Cahen in *THE Garden* for March 14th, with its suggestions for hybridising these charming little flowers, I feel sure your readers will be interested in seeing the enclosed photograph, which shows rather clearly what can be done by crossing a yellow trumpet with pollen of *Narcissus cyclamineus*. I took this photograph seventeen years ago. I have since then crossed yellow trumpet daffodils with the pollen from a seedling from *N. Emperor* crossed with *N. cyclamineus*, and have again crossed yellow trumpets with pollen from seedlings resulting from this secondary cross, and have had as a result glorious deep waxy yellow flowers as large as *Emperor* with scarcely any reflex in the petals and, curiously enough, I can almost always identify these seedlings by the little creamy tip to the perianth segments. In my experience these seedlings have not got good constitutions, and I am afraid it would be found that this is the drawback with all hybrids of these miniature



N. OBVALLARIS.      HYBRID.      N. CYCLAMINEUS.

spreading disease as black spot, or, indeed, any similar complaint, is likely to affect the life and growth of a rose, we act upon and thoroughly believe in the principle that "Prevention is better than cure."—HERBERT L. WETTERN, *Oxted*.

## IRIS TINGITANA.

SIR,—Perhaps my experience in growing *Iris tingitana* may be of interest to your readers. I obtained the bulbs from Messrs. Wallace of Tunbridge Wells, and at the end of October potted them in fibre without drainage and kept them in an unheated cellar till they had made a good start, then removed them to the windowsill of a room facing due south but having no artificial heat. This treatment suited them very well, and they made rapid growth. As soon as the buds were well advanced I transferred them to a sunny room having the additional heat of a fire, and by Christmas they were in full bloom with strong stalks and good foliage. I believe they could have been grown entirely without fire heat had they been potted a month or six weeks earlier.—W. CHAMBERS.

## LIMESTONE SOILS.

SIR,—In the various discussions on plants which thrive or do not thrive on limestone soils there is one point which I have not yet seen referred to, namely, the depth of the

varieties. I have found only a small percentage of triandrus hybrids are satisfactory in this respect. Trumpets crossed with bulbocodium in my experience produce the most appalling atrocities. *Minimus* and *cyclamineus* will intercross, and I have a delightful natural hybrid between these two which appeared in a grassy bank where its two parents had been naturalised for some years.—W. A. WATTS, *St. Asaph*.

## SEEDS AND SEED LISTS.

SIR,—One sentence in Mr. Eric R. Wettren's letter prompts me to put pen to paper in defence of British seedsmen. Mr. Wettren says: "It has always been a mystery to me why there is apparently no English firm sufficiently enterprising to cater for this branch of horticulture." The branch referred to is stocking and cataloguing seeds of trees and shrubs. The reason why is simply the smallness and uncertainty of the demand. There are some enthusiasts, like Mr. Wettren, who "indulge in the fascinating pastime of tree and shrub propagation," but they constitute a small circle, usually well acquainted with each other and mutually interested in their pursuit. One sows seeds of certain shrubs, another some other kinds, and each has some surplus seedlings which, naturally enough, will be passed on to friends rather than wasted. That is quite an

agreeable arrangement for the amateur, but the seedsman, in order to supply a customer with a half-crown packet of some particular shrub's seeds, sends abroad for enough seeds for at least a dozen packets. These are packeted, catalogued, put into stock, in all probability to remain there, and the seedsman finds it works out that in purchase, correspondence, postage, packeting and cataloguing he has spent a pound and received 2s. 6d. Meanwhile he has sold sacks of peas and pecks of onion, carrot and radish seed because they are in general demand, and the practice of exchanging and giving is less prevalent among the masses than among the few specialists.

That the foreign seedsman can always supply seeds of trees and shrubs is no indication of greater enterprise, but simply that he is the wholesaler of these particular lines, and can always fill an odd order without specially providing for it. If Mr. Wettren can persuade a few thousand amateurs to buy seeds of trees and shrubs, the British seedsman will show no lack of enterprise in this direction, but I have in my time helped to burn the seeds that were stocked in readiness for orders which failed to come after circulation of a very good catalogue.—A. J. M.

## SEQUOIA GIGANTEA.

SIR,—Perhaps you would like to add to your sequoia records the following: Planted 1856, at Hatch Beauchamp, Somersetshire; height in 1863, 11ft. 6ins.; the growth in 1862 was 21ins. Planted 1859, at Rev. J. Gould's, Burwash, Sussex; 1863, April, height 5ft. 10ins. The same diary notes *Araucaria imbricata* and *Cedrus Deodara*, planted 1841, and states that in 1860 the *Araucaria* was 26ft. high and the *Cedrus Deodara* 28ft. I wonder if any of the above survive.—GEO. DILLISTONE.

## SLUGS IN THE GARDEN.

SIR,—In reply to your correspondent "Formakin" *re* slugs, I quite agree that my statement that 15,000 slugs per day were killed last season in our kitchen garden may sound comical or all but incredible to anyone who did not see the pests or was not responsible for the supply of flowers or vegetables from the garden these pests had invaded, but I can assure "Formakin" my feelings changed from comical to desperate when confronted with such a serious menace. Does "Formakin" think it possible for anyone to pick eighty-seven slugs off one delphinium shoot not more than 9ins. high in the evening and secure fifty-four off the remains of the shoot next morning? The stool of the delphinium had previously been well "ringed" with Vaporite as a "protection." There was nothing comical from my point of view in planting over 3,000 onions on the Monday and looking on bare ground on Wednesday. Six rows each 58yds. long yielded fewer than a dozen parsnips, and double the number of onions resulted in nothing. One row of parsley over 60yds. long took me over an hour night and morning to clear of slugs, the "bag" in each case never being much below 1,000. I do not think any edging would have done me any good, as I found quantities of slugs up the peasticks, and plenty climbed up the gooseberry bushes and fed off the leaves. I am blest with a good edging in the flower garden in the form of miles of box edging, and in addition huge beech hedges, several yew hedges. In my efforts to destroy the slugs I used 40 bushels of soot, 1 ton of slacked lime, 2cwt. of slug destroyer, 2cwt. of Vaporite, 2cwt. of Terrafumite and various washes.—F. C. KING.



**MATTHEWS' HIGH GRADE HORTICULTURAL FERTILISER**  
COMPARE ANALYSIS

# MATTHEWS' BIG PRODUCTION FERTILISERS

THOUSANDS OF TONS SOLD ANNUALLY

**MATTHEWS' HIGH GRADE TOMATO FERTILISER**  
COMPARE ANALYSIS

		Amm.	Phos.	Potash	lbs.	cwts.
<b>PROFITABLE GROWING IN 1925</b>	<b>MATTHEWS' HORTICULTURAL</b>	7%	21%	4%	14 3/3	28 5/9
	<b>TOMATO</b>	9%	21%	6%	3 6/6	6 6/12
	<b>LAWN</b>	4%	25%	2%	3 1/5	6 10/10
NOTE—double value compared with some that are sold.						
<p><b>EXHIBITION &amp; PROFIT</b></p> <p><b>MATTHEWS' "Maximum Crop" GARDEN SEEDS</b></p> <p><b>SCOTCH SEED POTATOES</b></p> <p>Choice Flower Seeds Finest Spring Bulbs</p> <p>Write for Catalogue <b>IT WILL PAY YOU</b></p>	<b>MATTHEWS' HORTICULTURAL</b>	7%	21%	4%	14 3/3	28 5/9
	<b>TOMATO</b>	9%	21%	6%	3 6/6	6 6/12
	<b>LAWN</b>	4%	25%	2%	3 1/5	6 10/10
	<b>Bone Charcoal</b>	15%	67%	—	2 9/5	5 9/9
	<b>Bone Meal, English, Best</b>	45%	45%	—	2 9/5	5 9/9
	<b>Basic Slag</b>	—	30%	—	1 6/2	9 4/9
	<b>Bone Flour, Steamed</b>	1%	60%	—	2 3/4	7 7/12
	<b>Fish Manure</b>	10%	14%	—	3 6/6	6 12/12
	<b>Garden Salt</b>	—	—	—	1 6/2	9 4/9
	<b>Hoof and Horn</b>	16%	—	—	3 6/6	6 12/12
	<b>Kainit</b>	—	—	14%	1 6/2	9 4/9
	<b>Lime, Ground Carbonate, Superfine</b>	—	—	—	1 6/2	9 4/9
	<b>Meat and Bone Meal</b>	8.5%	18%	—	3 6/6	6 12/12
	<b>Meat Meal</b>	8%	30%	—	3 6/6	6 12/12
	<b>Nitrate of Soda</b>	18%	—	—	4 7/7	14 3/3
<b>Peruvian Guano</b>	14%	22%	2%	3 6/6	6 12/12	
<b>Sulphate of Ammonia. 21% Nitrogen</b>	25.75%	—	—	3 2/5	11 3/3	
<b>Sulphate of Potash</b>	—	—	50%	3 2/5	11 3/3	
<b>Superphosphate</b>	—	35%	—	1 8/3	5 3/3	

CARRIAGE PAID on orders to the value of 5/- upwards to the nearest station in the United Kingdom

ESSEX RESIDENTS 1/6 per cwt. less.

**JAMES & GEO. H. MATTHEWS,** Head Office: **HAROLD WOOD, ESSEX**

And at COLCHESTER, ONGAR, BRENTWOOD, CHADWELL HEATH, WICKHAM BISHOPS and BRIGHTLINGSEA

Packing and Bags Free; not returnable.

Phone: ROMFORD 284

**MATTHEWS' LAWN SAND**

Effectively kills all the common weeds in lawns, and at the same time acts as an excellent Fertiliser. Sprinkle evenly over the weedy patches, at the rate of 3-ozs. per square yard, in dry weather. Repeat at intervals of a few weeks, till the weeds are killed. The grass will become brown and appear to be burnt, but it will recover, and the useful grasses will grow more vigorously.

4/- 14 lbs., 6 6 28 lbs.,  
10 9 56 lbs.,  
20/- cwt.

## MATTHEWS' LAWN SAND

Effectively kills all the common weeds in lawns, and at the same time acts as an excellent Fertiliser. Sprinkle evenly over the weedy patches, at the rate of 3-ozs. per square yard, in dry weather. Repeat at intervals of a few weeks, till the weeds are killed. The grass will become brown and appear to be burnt, but it will recover, and the useful grasses will grow more vigorously.

4/- 14 lbs., 6 6 28 lbs.,  
10 9 56 lbs.,  
20/- cwt.

## Yes! Hydrangea Mad!! Why Not?

A fascinating and glorious feeling that gives real enjoyment to its possessor.

### THE MODERN HYDRANGEA

gives this delightful sensation and everyone can enjoy it by growing these wonderful new varieties; they are easy to grow, last longer, and are more effective in the greenhouse or garden than any other plant. The colours are a surprise and a delight, ranging from white, mauve, soft pink, rich pink, rose-pink, deep rose, salmon-pink, rosy red, clear red, blue, mauve-blue, blue on old rose, etc. Their cost is moderate compared with their great decorative value. H. J. J. has probably the finest collection in the world, and would welcome a visit or enquiries from all who are interested in Hydrangeas. H. J. J. offers his selection of 12 young plants in 12 distinct named varieties for 12/6. 12 ditto large, ex 5in. pots, 25/-; 12 ditto large that will give 4 to 8 large trusses, for 50/-. Large specimens for Tubs, 15/- and 21/- each. All delivered free for cash with order.

SEND FOR CATALOGUE.

**H. J. JONES, Ryecroft Nurseries, LEWISHAM S.E.13**

## GLORIOUS GLADIOLI

No garden is complete without these Lovely Flowers, and for house decoration they have few equals.

### THREE SPECIAL LINES

Mixed colours, 2nd size. Per 100, 4/6; 500 for 22/-  
" " 1st size. " " 7/6; " " 35/-  
" " Top size, " " 10/-; " " 47/6

Primulinus Varieties, Splendid Mixture,  
Per 100, 5/- & 7/6; Extra Choice, 10/-.  
Ask for special list and compare our Prices.

Carriage paid. Immediate despatch.

**LONGSTAFF & SONS, F.R.H.S.,**  
Near CHELSFIELD STATION, KENT

Please mention THE GARDEN when writing.

## 1925

CATALOGUE of  
Perpetual-Flowering

## CARNATIONS

If you are interested and would like a copy, post your name and full address to:

**C. ENGELMANN, Ltd.,**  
SAFFRON WALDEN, Essex

**SHRUBS** are becoming more and more the fashion in gardening. "Shrubs for Amateurs," Mr. W. J. Bean's new book, is the best on the subject at a reasonable price. 5/- net. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

### THE CULTURE OF CHRYSANTHEMUMS.

By W. WELLS, 2/6 net; cloth, 3/6 net; by post 6d. extra. —Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## FOR THE GREY GARDEN

BEAUTIFUL LAVENDERS, ETC., for planting now.

**Munstead**, dwarf, bushy and free, specially good 30/- per 100 250/- per 1,000  
**Old English** - - - 35/- " 100  
**Grappenhall** (tallest) - - - 35/- " 100  
**Dutch** (silvery foliage) - - - 35/- " 100  
**Cotton** - - - 50/- " 100  
**Catmint** (Nepeta Mussini) - 25/- " 100  
**Rosemary**, extra bushy - - - 6/6 " doz.  
**Southernwood** (Boy's Love) 1-1½ ft. 6/6 " doz.  
**Gum Cistus** (C. ladaniferus) 1-1½ ft. 10/6 " doz.

### YEWS! YEWS!! YEWS!!!

18 Fine specimens, about 8-9 feet, very bushy and transplanted but bare at bottoms for about 3 feet. 21/- each, the eighteen for £17

3 Ditto, ditto, 10-11 feet - - at 30/- each.

Come and see our Clipped Yews in Bird, Ball, and many shapes, £5 5 0 to £26 5 0 each.

**BAMBOOS** in 37 species and varieties. Cheap collections of Alpines, Perennials, Water Plants. Catalogues Free.

**HILLIER & SONS, West Hill Nurseries, WINCHESTER.**

Two popular gardening successes

## RHODODENDRONS for Amateurs

By E. H. M. COX. Demy 8vo.,  
with coloured wrapper and 15  
illustrations. 128 pages. 5s.

"The book is one which can be recommended to all interested in Rhododendrons. It is free from technicalities and should prove of great service to amateurs."—GARDEN LIFE.

## SHRUBS for Amateurs

By W. J. BEAN. Uniform with  
the above. 5s. (just published).  
The condensed wisdom of a great  
authority.

"The new work will prove a boon, for it is written in a refreshing style."  
—GARDENERS' CHRONICLE.

**"COUNTRY LIFE," LIMITED**

20, Tavistock Street, Covent Garden, W.C.2

Items of  
Interest from  
New Malden.

OUR new list of Herbaceous Plants is now ready and will be sent free on application. It also contains the cheaper Annuals for early spring planting. Our Collections as offered below contain varieties to give bloom during the entire season, and are rapidly becoming great favourites with Amateurs who find it difficult to make a suitable selection.

### Collections of Hardy Border Plants.

Collection A—12 Hardy Border Plants, in 12 varieties, our selection, 6/6.  
 Collection B—25 Hardy Border Plants, in 25 varieties, our selection, 12/6.  
 Collection C—50 Hardy Border Plants, in 25 varieties, our selection, 24/-.  
 Collection D—100 Hardy Border Plants, in 50 varieties, our selection, 42/-.

**HAMPTON PLANT CO.,**  
7, New Malden, SURREY.

Phone: Malden 330. Bankers: Barclays.



# YOU — OR THE WORMS?

You take pride in the lawn—a real pleasure to behold—then worms make an unwelcome appearance and the grass gets disfigured with mud-casts.

These mud-casts spoil the hard, level surface of the grass, be it used for recreation or otherwise.

It is quite a simple matter to get rid of the worms. Just sprinkle

## COOPER'S POWDER WORMKILLER

over the grass, water it well in, and see how the worms come to the surface. Then sweep them up. You have destroyed the worms and the mud-cast nuisance is over.

Cooper's Wormkiller costs—for 2 lb. tin 1/-; 7 lb. bag 1/9; 14 lb. 3/-; 28 lb. 6/-; 56 lb. 10/6; 112 lb. 18/6. Special quotations for ton quantities.

For the destruction of daisies, dandelions and similar growths in the grass, there is nothing better than

## COOPER'S LAWN SAND.

It fertilizes the lawn as it kills the weeds. TRY IT.

Prices—2 lbs. for 1/3; 7 lb. bag 2/6; 14 lb. 4/-; 28 lb. 7/6; 56 lb. 13/-; 112 lb. 25/-.

Special quotations for ton quantities.

If your local agent cannot supply your requirements, please write to

**WILLIAM COOPER & NEPHEWS, Ltd.,  
BERKHAMSTED.**

There's satisfaction in every "Cooper" product.

## County Borough of Southport

### The SCHEDULE for the SECOND GREAT ANNUAL Southport Flower Show

—is now ready—

THE SCHEDULE CONTAINS  
—A LIST OF JUDGES—

The 23 Silver Challenge  
Trophies, the Medals and Cash  
Prizes offered, represent a total  
— amount of over £2,900 —

Spaces 15ft. by 10ft. will be provided  
inside the Show Ground for Exhibits of  
HORTICULTURAL SUNDRIES at  
£5 per space

Schedules and plan of Show ground showing the positions  
for the Horticultural Sundries exhibits, may be obtained  
post free on application to the SECRETARY, FLOWER  
SHOW, TOWN HALL, SOUTHPORT.

Please mention THE GARDEN when writing.

## WOLVERHAMPTON FLORAL FETE

July 14th, 15th and 16th, 1925

£1,000 in Prizes

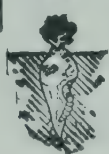
New Class for Begonias (Amateurs)

Schedules on application to the Secretary,  
(post free),

G. W. A. MARTIN, 46, QUEEN STREET,  
WOLVERHAMPTON.

Please mention THE GARDEN when writing.

## KILOGRUB



Exterminates all Garden Pests in the soil.

Your Seedsman has it.

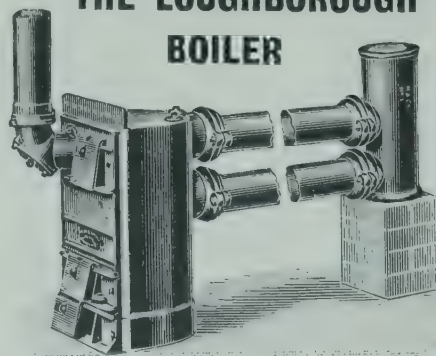
Tins:—9d., 1/6, and 2/6.

Bags:—1/2-cwt. 6/6; 1/4-cwt. 9/6; 1-cwt. 15/.

Write for particulars to the manufacturers—  
**JOHN PEAK & Co., Ltd., Wigan, Lancs.**

Please mention THE GARDEN when writing.

## THE LOUGHBOROUGH BOILER



The high reputation of this Boiler for efficiency  
and economy is still unrivalled

Easy to fix, easy to manage, and most  
economical in fuel, it is the ideal  
Boiler for the Amateur's Greenhouse

Price Lists and Estimates for complete  
apparatus on application

**MESSINGER & CO., LTD.** LOUGHBOROUGH  
LEICESTERSHIRE  
LONDON OFFICE: 122, VICTORIA ST., S.W.1

Please mention THE GARDEN when writing.

## BENTLEY'S SPECIALITIES

### Weed Destroyers

(Liquid 1 to 80)

(Powder 1 to 25)

### Daisy Killer (Lawn Sand)

### Earthworm Destroyers

(Liquid and Powder)

### Fertilisers

For Lawns, Fruits, Flowers and Vegetable

### Insecticides

For all kinds of Pests and Filth

### Fungicides

For fungoid Growths indoors and outdoor

### Fumigants

For use under glass and in the soil

### Garden Requisites

Of all descriptions

Complete illustrated Catalogue free on application

— MANUFACTURERS: —

**JOSEPH BENTLEY**

Chemical Works

LTD.

Barrow-on-Humber, HULL

Please mention THE GARDEN when writing.

## SMITH'S "SWIFT & SURE"

### NON-ARSENICAL WEED KILLER

Non-poisonous. Perfectly safe to use.

Supersedes all others.

1 GALLON to make 50 GALLONS of LIQUID

10/- carriage paid. Package free.

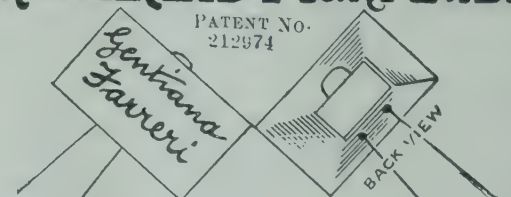
SMITH'S 'PERFECT' LIQUID &  
POWDER WEED KILLER.

Sole  
Makers: **MARK SMITH, LTD.,**  
LOUTH, LINCOLNSHIRE.

Please mention THE GARDEN when writing.

## The WIZARD Plant LABEL

PATENT No.  
212974



Made in Red Pottery, 2 1/2 x 1 1/2 ins., with rustless wires,  
12 in., 2/- doz.; 7 in., 1/7 doz. 1 1/2 x 1 in., with wires 6 in.,  
1/4 doz. For tying on, 1/6 and 1/3 doz. Waterproof  
Ink, 9d. and 7d. bot. Crow Quills, 2d. Postage extra.

E. TORKINGTON · NEW HALL · MAIDENHEAD

Please mention THE GARDEN when writing.

## FERTILISERS.

LAWNS, 20/-; FRUIT TREES, VINES, 19/6;

GENERAL GARDEN USE, 17/-;

WORM KILLER, newly introduced, 19/-

Per cwt., carriage paid. Also all other fertilisers.

**HY. RICHARDSON & CO.,**  
Skeldergate Bridge Works, YORK

Please mention THE GARDEN when writing.

## Fowler's LAWN SAND AND FERTILIZER

The Originator of Lawn Sands

Destroys all obnoxious weeds, and discolours the  
grass least of any. Produces a rich velvety green.

60 years' experience in lawn culture.

In tins, 1/6, 3/-, and 5/6; 1/2 cwt. 8/6; 1/4 cwt. 16/-; 1 cwt. 30



## LETHORION IMPROVED NICOTINING CONE FUMIGATOR

Certain destruction to all pests in glass houses

Only a match required for starting it!

No. 1 .. For 1,000 cubic feet .. 10d.

" 2 .. " 1,500 " " .. 1/3

" 3 .. " 2,500 " " .. 1 9

Sold by all Nurserymen and Seedsmen.

CORRY & CO., Ltd., Shad Thames, London, S.E. 1

## Eureka GARDEN HELPS

### WEED KILLER

LAWN SAND,  
EARTHWORM DESTROYER  
SOIL FUME (DIG IN)  
FUMIGANTS, INSECTICIDES, ETC.

See full lists

ASK YOUR AGENT. The Weed Killer  
1/9 size, sufficient to dress 50 sq. yards,  
3/- for 100, 11/- for 400, 77/6 for 4,000

LARGEST SALE, CHEAPEST TO USE.

If any difficulty in obtaining,  
we promptly send direct to you  
and give name of nearest Agent

ONLY MAKERS

**TOMLINSON & HAYWARD**  
LINCOLN. LTD.



## THE CARNATION SHOW

THIS has generally been supposed to have been a very unfavourable time for the perpetual-flowering carnation, but from the exhibits at the British Carnation Society's meeting on March 26th last it was fully evident that the first prize winners either overcame the difficulties or were not visited by them.

The only group of flowering plants was that shown by Mr. T. Pateman, gardener to Sir Charles Nall-Cain, Brocket Hall, Hatfield. These plants were magnificently grown and deservedly popular.

In the open classes the competitors were few. The challenge cup in the principal class was won by Mr. C. Engelmann, largely on account of the superior arrangement of his flowers, and he was also first in the classes for three vases each of British and of American novelties and for a vase of not less than 100 blooms of one variety, for which he showed Nigger. Mr. W. H. Page was first with a vase of fifty blooms in three or more varieties. But the best exhibit of all in the open classes was the vase of Tess which won the first prize, in a well contested class, for Mr. George West.

In the colour classes, Messrs. Allwood Brothers won nearly all the first prizes. Their best white was White Enchantress. The new Master Michael Stoop was the best pink, and Laddie was the best salmon-pink; Chintz was first in the fancies; while Spectrum, shown by Mr. C. Engelmann, was the best red, and also won the silver-gilt medal for the best bloom in the classes.

Sir Charles Nall-Cain was awarded the first prize for a semicircular group of plants, and also first prize for a vase of crimson carnations; but most of the other first prizes in the principal amateurs' classes were won by Sir Randolph Baker, Bt., Ranston, Blandford, with splendid blooms. His decorative arrangement of such varieties as Marian Willson, Tarzan, Laddie, Topsy and Circe, with appropriate foliage, was admirable. Mr. A. Swann, Colwood Lodge, Haywards Heath, used Wivelsfield Apricot very effectively.

Mr. Walter Hyde, Sunbury, won the majority of the prizes in the classes for growers of a limited number of plants; and in this section Mr. Ernest Walker, Radcliff-on-Trent, was also a successful exhibitor.

## NEW CARNATIONS.

**MARCHIONESS OF SALISBURY.**—The half-dozen or so plants which accompanied the vases of this splendid novelty made an admirable show, well illustrating its great decorative value. While the plants are dwarf, they throw up flower stems quite long enough and in great abundance. The blooms are large, perfectly formed and of a fascinating pale salmon-pink colour. Award of merit. Shown by the Marquess of Salisbury.

**CAMERON.**—This is an old rose-coloured carnation with the substantial petals and compact form of Mary Allwood, but decidedly larger, and the blooms are pleasantly fragrant even on the cold, raw, sunless day. The habit of the plants and the foliage are very good, and the flowers are borne on long, stout stems. Award of merit.

**MASTER MICHAEL STOOP.**—This novelty was raised by Mr. G. Carpenter. As Messrs. Allwood Brothers have given the variety three years trial, we may conclude that it can be grown even better than as now seen. The bright cerise flowers are quite large, but while the petals are broad and substantial there were not sufficient on the outer parts of the flower and this paucity gave it the appearance of possessing "guard petals." Award of merit.

**SHOT SILK.**—We have greatly admired the warm Eastern colouring of this delightful variety on several occasions during the past winter. It is a large, well formed, fringed flower of Indian red colouring, flaked and rayed with deep salmon-red. Award of merit. The last three varieties were shown by Messrs. Allwood Brothers.

## GIVEN AWAY FREE!

Large Packet Giant Sweet Peas with All 10/- Orders.

## Exhibition Roses

8/6 per dozen

Gen. McArthur, Daily Mail, Ophelia, etc. Stds. 3/- each. Polyantha Roses, 10/- doz. Climbing Roses, Gloire de Dijon, Marechal Niel, W. A. Richardson, Richmond, 1/6 each. Ramblers, 1/3.

Apples, Pears, Plums, 1/6, 2/6 each.

Red and Black Currants, 3/6 and 4/6 doz.

Rasps., 1/- doz. Loganberries, 1/- each.

Grape Vines, 4/6, Black Hambro.

Delphiniums, Phlox, Peonies. All named. 5 6 doz. Strong Clumps.

100 Glorious Prize Gladioli, 7/-; 50, 4/-; 25, 2/3. In 5 beautiful shades (white, scarlet, flame, mauve, yellow, pink).

Prize Medal Begonias, Double or Single, red, pink, white, yellow, 2/6 doz. Mixed, 2/- doz. Enormous blooms, 4-6 ins. across.

Cheiranthus Allionii, Lovely Orange Wallflower, blooms all through summer, 4d. per doz. Pansies, 9d. doz. Violas, 2/- doz.

Clematis, fine named plants, 2/-. Wistaria, 2/6. Honeysuckle, 2/-. Passion Flower, 1/6. Evergreen Privet, 10/- 100. Box Edging, 12/- 100.

## CLARKES

(Dept. G),

Royal Hampton Nurseries, MIDDLESEX

Please mention THE GARDEN when writing

## RHODODENDRONS

A few rare and interesting HYBRIDS and newer CHINESE SPECIES.

A limited stock to offer of the magnificent new Rhododendron **Loderi**, raised by the late SIR EDMUND LODER, in the following best named varieties:—

<b>Loderi White Diamond</b> , good plants, 1½ ft.	Each
" <b>Pink Diamond</b> , " "	42 -
" <b>Gamechick</b> , " "	42 -
" <b>Patience</b> , " "	50 -
" <b>Sir Joseph Hooker</b> , " "	50 -

**Dawn's Delight**, an extra fine Aucklandii hybrid, raised by the late Mr. Mangles. Opens carmine ruby, changing to pink. Fine conical truss. 1½ ft. 10 6

**Boddartianum**, fine white, dark eye, 1½-2 ft. 7 6

**Dr. Stocker**, extra fine white, 1½ ft. 7 6

**Maximum triumphans**, bright scarlet, 1½ ft. 7 6

## CHINESE SPECIES.

**Auriculatum**, ivory white, very late flowering, 9 to 12 ins. 10 6 to 15 -

**Brevistylum**, pale to deep rose, 1½-2 ft. 3 6 to 5 -

**Fulvum**, lacteum series, 1½-2 ft. 10 6

2-2½ ft. 15 -

**Oreodola**, beautiful pinkish rose, 1½ ft. 3 6 to 5 -

**Oreotrophes**, varying in colour from ivory white to plum purple, 1½ ft. 5 -

**Taliense**, fine new species, 1 ft. 3 6

**Trichocladum**, deciduous species with yellow starlike flowers, 1½ ft. 3 6

**Yanthinodum**, deep reddish purple, 1-1½ ft. 3 6

**Azaleodendron "Nellie"**, pure white, with orange eye, a cross between Azalea occidentalis and a crimson rhododendron, 1½-2 ft. 3 6 and 5 -

## H. WHITE

Sunningdale Nurseries, Windlesham SURREY

Please mention THE GARDEN when writing.



## Don't Waste Your GARDEN RUBBISH!

THE ADCO PROCESS  
(Patented in the United Kingdom and Abroad)

WILL TURN IT INTO

SYNTHETIC

## FARMYARD MANURE

ADCO is your garden's "Crop Insurance Policy." It maintains soil fertility at a "low premium" by guaranteeing a supply of organic fertiliser. As refuse accumulates treat it with

## ADCO ACCELERATOR

If at least half consists of soft green materials such as lawn cuttings, cabbage leaves or green weeds; but when dead leaves, vegetable stalks, herbaceous border cuttings, prunings, straw and straw packing, form the bulk of the heap, use **Standard ADCO**.

If your dealer does not stock ADCO write direct to us, mentioning his name and nearest Goods Station.

1 cwt. of ADCO makes from two to three tons of manure according to the class of rubbish treated.

ADCO Accelerator .. 28 lb. 4/6, 56 lb. 8/-. 1 cwt. 15/-  
Standard ADCO .. 28 lb. 6/- 56 lb. 11/6 1 cwt. 20/-

ALL CARRIAGE PAID. CASH WITH ORDER.

ADCO, Ltd.



40, HARPENDEN.

## Three things all young plants MUST have:

1. Protection against treacherous weather.
2. Continuous natural ventilation.
3. Plenty of light.

Are you giving your plants these essentials?

The cold frame doesn't do it—it only gives protection at the expense of light and air.



The only way to make certain of fine crops, whatever the weather.

**For General Use**  
send for this case of "A" pattern Cloches. Each Cloche 7 ins. high. Case contains 12 Cloches, covering 14 feet. 18/-

**For Larger Plants**  
order "B" Cloches. 9 ins. high. Set of 15, enough to cover 22½ feet. 35/-

Carriage Paid Home.

(Scotland 2d. in 1/- extra.)



is to cover your young plants with the Chase Continuous Cloche, as so many experienced gardeners are now doing. Made entirely of glass and wire, throwing no shadows to speak of, the Chase Continuous Cloche traps every fleeting ray of sunshine and keeps your young plants always snug and warm. At the same time, it provides ample ventilation continuously, thus ensuring sturdy natural growth without forcing or coddling.

Write for our **FREE BOOKLET No. 7**

and understand all about the Chase Continuous Cloche whilst there is yet time to use it on this year's sowings

**Chase Continuous Cloche**  
A Trap to catch the Sunbeams

Dept. 7, Chertsey, Surrey





# NOTES FROM CONTRIBUTORS

## THE CHARM OF SINGLE BLOSSOMS

THERE may be readers of THE GARDEN who can recollect the time when almost any sort of single flower was regarded with little esteem compared with double forms in the same family. The old school of florists, especially, were drawn to double flowers, and never lost an opportunity of selecting them in preference to singles. One thinks of double wallflowers—now seldom seen—of ten-week and Brompton stocks and hollyhocks. I remember the time when all single-flowering stocks were uprooted immediately it was seen how they were shaping, and more than once I was reminded that to allow single stocks to remain "would only spoil the bed." Happily, we live in days when the beauty of single flowers is fully appreciated. I have a keen recollection of the fight we had in the early days of chrysanthemum exhibitions to gain for them "recognition" in the schedules, and the objection raised against them. It was nothing less than prejudice, but the many beautiful varieties which followed the introduction of the white Mary Anderson have captivated so many that opposition has died away. I wonder sometimes what the old rose growers who prided themselves on such sorts as Gloire de Dijon, John Hopper and Baroness Rothschild would have thought of the charming single sorts we call ours to-day? Even pyrethrums came under the ban, as, at first, the coming of the singles was looked upon suspiciously in many quarters, but their grace and beauty overcame all prejudice. In my early days asters like Victoria, Betteridge's Prize Quilled and Truffaut's French Peony were the principal sorts sown for gracing the garden. One tries to imagine sometimes what our forefathers would have said of our modern singles with their seductive colours. Would they not have placed them in the same category as single stocks, which they pulled up and threw on the rubbish heap, as being something so inferior and not worth growing—simply because they were single! I am inclined to think so.—CLAREMONT.

## VEGETABLE MARROWS FOR THE TABLE.

NOT always have vegetable marrows of small or medium size been sought after; rather does one remember that those of large proportions were once deemed the only sorts worth consideration. This used to be demonstrated at exhibitions, but huge monstrosities have long since given place to smaller and more delicate varieties. Those responsible for drawing up schedules, are wise enough to recognise the fact that mere size in a vegetable marrow is nothing to be proud of, inasmuch as overgrown specimens are frequently coarse and hollow, hence the proviso opposite the entry being inserted "fit for table." It is a hint to the grower that quality counts. It is a guide to the judges in carrying out their duties, and makes their work less open to criticism. In the absence of the saving clause, I have witnessed acrimonious discussions between disappointed exhibitors and show officials. Weighty and coarse specimens have been taken little account of when placed in competition with such sorts as Table Dainty, Epicure, Moore's Cream and Pen y byd. On more than one occasion the smaller and more refined marrows have taken premier honours, and from the point of view as to their fitness for cooking the awards were rightly given. I venture to say that no chef, had he the right to adjudicate, would hesitate to give awards to those fit for the table, over larger and less valuable for consumption as vegetables.—W. LINDERS LEA.

## THE LESSER CELANDINE. (With no apologies to Wordsworth.)

Panseys, lilees, kingcups, daisies,  
Have the honest gardner's praises;  
Long as there are coloured sets  
Primroses are annual orders;  
Long as there are violets  
They will have a place in borders.  
There's a flow'r shall not be'n in mine,  
'Tis the little celandine!

Forks of some men travel far  
For the finding of a weed;  
Up and down the walks they go  
Making dandelions rout!  
I'm as great as they, I trow,  
Since the day I hoofed thee out,  
Little beast!—I'll make thee stir  
If I have to lift that fir.

Creeping in the rockery shelf,  
Far too lavish of thyself;  
Since, alas! we first have met  
I have seen thee, high and low,  
Thirty years and more, and yet  
'Twas a weed I did not know.  
Thou hast now, dig as I may,  
Fifty bulb roots in a day.

Ill befall thy yellow flowers,  
Children of neglectful hours  
When the gardner has not seen  
Masses of them pushing through;  
Plants of a more lofty mien  
Choked and ousted just by you.  
If there's a flower undivine  
It is that beastly celandine!

DOLFE WYLLARDE.

## OROBUS AURANTIACUS.

THIS good old plant does not figure so prominently in the border of hardy flowers as it did at one time when hardy plants were fewer than now, but it should not be forgotten when adding to one's collection or even where comparatively few species and varieties of plants are cultivated in the smaller garden. I am aware that it is less bright than *O. aureus*, but it has a distinct

tone of colour about it not generally to be met with in summer, when it flowers, while the pea-shaped blooms are always appreciated. It is later than the useful *O. vernus*, also, and has to hold its own with a greater variety in the border than that pretty species. It has a good many points in its favour. It is quite hardy. It is not too fastidious regarding soil or exposure, while it blooms very freely, and the rather tawny orange colour is distinct from that of most of its rivals of the season. Its height, too, is moderate enough, even for the small, narrow border. I do not recollect ever having met with it more than 2ft. high, and more frequently it was less than that. Ordinary garden loam will answer for it, and, although it appears to have a preference for full sun, it will not complain and sulk if planted in partial shade. Altogether, *Orobis aurantiacus* has a good number of points in its favour. It may still be planted this spring, and, with reasonable weather, should bloom during the first season and much better in another one.—S. ARNOTT.

## CATALOGUES RECEIVED.

Messrs. Perry, Hardy Plant Farm, Enfield.—Alpines and Perennials, Water Lilies and Bog Plants.

Messrs. Maxwell and Beale.—Descriptive List of Alpine and Rock Plants, with a supplementary list of Heaths, of which this firm offers a wide choice of species and varieties. A most useful list for all interested in the growing of heathers.

Messrs. Storrie and Storrie, The Nurseries, Glencarse, Perthshire.—Flower Seeds and Seedlings.

## FOREIGN.

Fr. de Laet, Contich-Village-lez-Anvers, Belgium. An excellent catalogue of cacti with numerous half-tone reproductions which are exceedingly good. Space is devoted to all the succulent plants, and we recommend this list to all cacti lovers. No doubt the catalogue will be obtained if application is made to the above address.



Types made include Pneumatic, Hand, Knapsack, Bucket and Wheeled, Wet and Dry Sprayers. Prices from 10/-

**VERMOREL "ECLAIR" Spraying Machines**

Gained the Highest Awards given in their respective classes at the Royal Horticultural Society's Trials, 1924.

**COOPER, PEGLER & CO., Ltd.**  
24a 26c, Christopher Street, Finsbury Square, LONDON, E.C.2

Write for Full Particulars and Catalogues.



Horse and Hand  
Hoe Cultivators  
70/- & 35/-



# THE GARDEN.

**WATERER'S GOLD MEDAL RHODODENDRONS.** Azaleas, Rare Hardy Shrubs, Alpine and Perennial Plants, Vegetable and Flower Seeds, Scotch-grown Seed Potatoes, Asparagus, 3 year 17/6, 2 year 12/6 per 100. Catalogue free.—**JOHN WATERER, SONS & CRISP, LIMITED,** Twyford, Berks; Ashshot, Surrey; and London.

**WAKELEY'S PATENTED HOP MANURE.**—The original and only substitute for Stable Manure. See advert on back cover.

**WM. DUNCAN TUCKER & SONS, LTD.,** Lawrence Road, South Tottenham, N.15.—Conservatories, Winter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**BIRDS' BATHS, GARDEN VASES, SUN-DIALS, NESTING BOXES.** Catalogue (No. 4) free.—**BOULTON, 60, Buckingham Palace Road, S.W.**

**RIVERS' ASPARAGUS.**—Strong roots, one, two and three years old. Fruit trees, Roses, Vines and Orchard House trees of first-class quality. A large stock always on view. Inspection invited. Price list post free.—**THOS. RIVERS AND SON, LIMITED,** The Nurseries, Sawbridgeworth, Herts.

**TANNED GARDEN NETTING,** small mesh, 25yds. by 1yd., 2s.; 25yds. by 2yds., 4s.; 40yds. by 1yd., 3s. 3d.; 40yds. by 2yds., 6s. 6d.; 40yds. by 3yds., 9s. 9d.; carriage paid. Compare our netting with others. Lists now ready.—**GALLOP, Net Manufacturer, Hastings.** Telephone: 352.

**TO LOVERS OF ROCK GARDENS.**—Inexpensive plants for Sale. Apply **NELL SHAW, Hatfield Place, Bath.**

**WELLS' CATALOGUE OF CHRYSANTHEMUMS** now ready, and will be sent post free on application.—**W. WELLS & Co., Merstham, Surrey.**

**WM. ARTINDALE & SON, Nether Green** Nursery, Sheffield, will be pleased to send their Catalogues of Hardy Plants, Seeds and Gladioli on request.

**ALPINES, ROCK PLANTS ONLY.**—Descriptive Catalogue 600 varieties, free.—**TERRY LEE, F.R.H.S., 12, Morden Road, Stechford, Birmingham.**

**ROCK PLANTS, best varieties, inexpensive,** list free.—**MARION GLEDSTANES, Fardross, Clogher, Ireland.**

**IPSWICH RARE SEEDS.** Catalogue describing nearly 3,000 kinds now ready. Free on application to **THOMPSON AND MORGAN, London Road, Ipswich.**

**HERBERT CHAPMAN'S Bargain List of Job** Lots of choice Daffodils, offered in order to clear ground, is now ready, and will be posted to anyone sending a p.c. to **HERBERT CHAPMAN, LTD., Rotherside Gardens, Rye, Sussex.**

**MECONOPSIS WALLICHII,** the lovely sky-blue Satin Poppy: Strong plants, 3, 4/-; 6, 7/6; post free.—**MILNE, South Darley, Matlock.**

**HARDY PRIMULAS.**—Superb plants. *P. frondosa* (lilac), *pulverulenta* (crimson), *Juliae* (purple), *rosea* (pink), *sikkimensis* (sulphur), *denticulata* (helio), *japonica* (blush); any 6, 4/6; post free.—**MILNE, South Darley, Matlock.**

**IMPROVE YOUR GARDEN** by the use of solid Oak Trellis Screens; they are ideal for growing creepers of all kinds and for securing privacy, at the same time adding an artistic feature that will last a lifetime (being pickled in preservative). No trouble to erect (being made in sections). Send for lists and get an estimate from **W. T. REVITT, Railway Works, Olney.**

**MATTHEWS' big production Fertilisers.**—Thousands of tons sold annually. For prices, see *THE GARDEN*, January 24th, 1925 (page vii). Catalogue of Scotch Seed Potatoes and Seeds on application.—**JAMES AND GEORGE H. MATTHEWS, Harold Wood, Essex.** Phone Romford 284.

**FOR 10/-** I send free to you 14 rooted and sound cuttings of Carnations in 7 of the best named new Riviera varieties and 7 different colours.—**P. GEYER, Horticulteur, St. Jean, Antibes, A.M., France.**

**BARR'S FLOWER & VEGETABLE SEEDS,** of finest selected strains and tested growth, also the best Scotch grown, hand-picked Seed Potatoes, strong Asparagus Plants, etc.

**BARR'S HARDY PERENNIALS, ALPINES, ROCK PLANTS, AQUATICS, CLIMBERS, TALL and DWARF FLAG IRISES, etc.,** for Spring planting.

**BARR'S LILIES, GLADIOLI, DAHLIAS, CANNAS, MONTBRIETIAS, ANEMONES, BEGONIAS, TUBEROSES, TIGRIDIAS, &c.,** for Spring planting. Catalogues free.—**BARR & SONS, King Street, Covent Garden, W.C.2.**

**THE DOUGLAS CLOVES AND BORDER CARNATIONS;** glorious scent, stiff stems, and continuous flowering. The new crop of seed is now ready to sow. 2s. 6d. and 5s. per packet. Plant catalogue now ready.—**J. DOUGLAS (The Premier House for Carnations), Gt. Bookham.**

**IRON AND WIRE FENCING FOR GARDENS.**—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—**BOULTON AND PAUL, LIMITED, Norwich.**

**ALL PROFESSIONAL GARDENERS** should become Members of the British Gardeners' Association. Full particulars (stamp).—**JOHN WEATHERS, 1, Park View, Isleworth.**

**SEWAGE DISPOSAL FOR COUNTRY HOUSES.**—No emptying of cesspools; a perfect fertiliser; no solids; no open filters: perfectly automatic; everything underground. State particulars.—**WILLIAM BEATTIE, 8, Lower Grosvenor Place, Westminster.**

**JAMES BACKHOUSE, F.L.S., F.R.H.S.,** for many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to **CAER FEGLA, Arthog, North Wales.**

**LAXTON'S NEW SEED CATALOGUE,** containing Novelties for 1925. New Pea "Bedford Champion" and "Laxton's Progress," post free on application. Fruit Tree Catalogue and Cultural Hints can also be sent, post free, on request.—**LAXTON BROTHERS, Nurserymen, Bedford.**

**YORK STONE PAVINGS,** crazy or rectangular, rustic copings, steps, roughly squared or random shaped, flat bedded wallstones, garden edging, rockery, etc.—**SAMUEL JOHNSON AND SON, Quarry Owners, Mirfield, Yorkshire.**

**CHOICE NEW CHRYSANTHEMUMS.**—Our Catalogue of nearly 900 varieties, including Grand Novelties for 1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready. Post free on application.—**J. W. COLE AND SON, Chrysanthemum Specialists, Peterborough.**

**PRIMULA, ALPINE AND PERENNIAL** Seeds, from large (1,500) collection, sold cheap. List free.—**REV. J. F. ANDERSON, Glenn Hall, Leicester.**

**GARDEN NETS.**—Best tanned, small mesh, 25yds. by 1yd., 2/-; 25yds. by 2yds., 4/-; 25yds. by 3yds., 6/-; 25yds. by 4yds., 8/- Carr. Paid. Satisfaction guaranteed. Tennis nets from 10/-. Special nets for tennis boundary. Pea training nets. Lists and samples free.—**G. JARRETT, Net-maker, Rye.**

**CANADIAN AND AMERICAN GLADIOLI.**—The best of the standard varieties and novelties.—**J. W. CROW, Simcoe, Ontario, Canada.**

**TENNIS COURT FENCING.**—A speciality. Made up as complete enclosures, with standards, wire, and straining posts, from 6 ft. to 12 ft. high. Write to Dept. FP/G for particulars.—**BOULTON AND PAUL, LTD., Norwich.**

**VANCOUVER ISLAND** and Pacific Coast rare ornamental alpine and lowland plants, bulbs, etc. Only those difficult or impossible to obtain in England are offered. Plants well packed and despatched at the right time of year arrive in good condition. Write for list.—**J. BENNETT, Lake Hill P.O., Victoria, B.C., Canada.**

**THE WORLD'S MOST POPULAR DWARF PEAS.**

Per half-pint. 1/6 Post free.	Sutton's Pioneer. Big Crop. Early Maturity. Small habit of growth. Require practically no sticks.
-------------------------------------	--

**SUTTON AND SONS, THE KING'S SEEDSMEN, READING.**

**DOBBIE'S 1925 CATALOGUE AND GUIDE,** 136 pages, 194 illustrations. Free to all readers. Please mention *THE GARDEN* when writing.—**DOBBIE & Co., LTD., Edinburgh.**

**BATH'S SELECT SEEDS AND PLANTS.**—New Illustrated Catalogue of choice Vegetable and Flower Seeds and Plants is now ready, and will be sent post free on application.—(Dept. E), **R. H. BATH, LTD., Floral Farms, Wisbech.**

**CHEAP GOVERNMENT WIRE!!!** Great for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—**GREEN'S GOVERNMENT STORES, 69, Albert Street, Lytham.**

**108 GLADIOLI** for 8s. 9d. post paid.—The most dazzlingly brilliant flowers on earth, with spikes of blooms 18ins. long; 12 each of 9 kinds (108 bulbs), all separately packed and named, for 8s. 9d., post paid; half lot, 4s. 9d., post paid (cultural instructions and beautifully illustrated Flower and Vegetable Catalogues included).—**J. KAY AND Co., Goodmayes Road, Goodmayes, Essex.**

**BEGONIAS AND GLOXINIAS.**—Kay's prize strain with blooms often measuring 8ins. across: a collection of 12 Single and 12 Double Begonias, also 6 Gloxinias—all separately packed and named, with cultural instructions and illustrated catalogues, for 6s. 3d., post paid; half lot, 3s. 6d., post paid.—**J. KAY AND Co., Goodmayes Road, Goodmayes, Essex.**

**HEDGING PLANTS.**—**PRIVET.**—Strong English-grown, bushy and well rooted: 30-36ins. at 13/- per 100. 36-40ins. at 15/- per 100. **QUICKTHORN.**—Extra bushy: 24-30ins. at 10/- per 100. Carr. Pd. on 1,000 Lots.—**HODSONS, Castlegate, Nottingham.**

**PRIMULA SEED.**—**P. Beesiana, P. Bulleyana, P. Cockburniana, P. Inverleith Hy., P. Aillen Aron, P. muscaroides, P. Mooreana, P. La Lorraine, P. mollis, P. pulverulenta, P. japonica eximia, P. sikkimensis,** 1/6 per packet.—**W. HUNT, Primula Grower, 4, Northcote Street, Edinburgh.**

**TIMBER** at sale prices, direct from port, carriage paid. No order too small. Every foot guaranteed sound.—**RETAIL TIMBER SUPPLY, Selby Street, Hull.**

**MICHAELMAS DAISIES.**—Pyrethrums and other hardy perennials. For new catalogue write to **MRS. THORNELY, Nursteed, Devizes.**

**GARDEN NETTING.**—Best selected, small mesh, tanned, 25 by 4 yds., 8/-, or 8 yds., 16/-. Carriage paid. Tennis Nets and Standards. List free.—**STRAWBERRY NETTING Co., 5, Suffolk Terrace, Lowestoft.**

**LOOK! TANNED GARDEN NETS.**—All orders despatched same day. 25 yards by 1 yard, 2/-; 25 by 2, 4/-; 25 by 3, 6/-. Odd netting for bushes, 6 lbs. for 2/6. All carriage paid. Any sizes supplied. Also Tennis Boundary Nets.—**MOORE & Co., Net Works, Rye.**

**CAULIFLOWER PLANTS.**—Best (Autumn-Sown) Plants.—Early London and Walcheren, 12/6 per 1,000; prompt delivery, carriage paid; cash with order. Special quotation for large quantities, and Price Lists of all varieties of Cabbage Plants (Autumn-Sown) of the best stocks and at the lowest prices, on application.—**JOHN GILLIES, PRESTONPANS, LTD., Prestonpans, East Lothian.** Largest cabbage plant growers in Britain. Established over 50 years. Telegrams: "Plants, Prestonpans." Telephone 24 Prestonpans.

**GREENHOUSE PAINTING AND GLAZING.**—"Vitolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7lb. tins., 4/- post free; 14lb. tins., 5/6, each, carriage extra, tins free.—Full particulars from **W. CARSON & SONS, Grove Works, Battersea, S.W.11.**



**GLORIOUS GLADIOLI**

No garden is complete without these Lovely Flowers, and for house decoration they have few equals.

**THREE SPECIAL LINES**

Mixed colours, 2nd size. Per 100, 4/6; 500 for 22/-  
 " " 1st size. " " 7/6; " " 35/-  
 " " extra choice " " 10/-; " " 47/6

Primulinus Varieties, Splendid Mixture,  
 Per 100, 5/- & 7/6; Extra Choice, 10/-.  
 Ask for special list and compare our Prices.

Carriage paid. Immediate despatch.

**LONGSTAFF & SONS, F.R.H.S.**  
 Near CHELSFIELD STATION, KENT



**CHARLES TURNER'S**  
**Dahlias, Roses in Pots,**  
 HERBACEOUS PLANTS AND SEEDS.

ASPARAGUS, strong roots, 2 year, 15/- 100; 3 year, 25/- 100; Forcing, 35/- 100. Catalogues on application to:

CHARLES TURNER, The Royal Nurseries, SLOUGH

**LOBELIA HUNTSMAN**  
 Finest of the Scarlet Cardinal Flowers.

*NOW is the Time to Plant.*

1/6 each, 15/- dozen, 100/- 100

T. SMITH, Daisy Hill Nursery, Newry, Co. Down

**Reliable Lincolnshire Seed Potatoes**

**Specially Selected Stocks.**—Sharpe's Express, Eclipse, Sir John Llewellyn, British Queen, King Edward's, Queen Mary, Ally and Majestic. Large or small quantities

—When writing please state quantity required to—

**W. DENNIS & SONS, LTD.**

(Dept. No. 12), KIRTON, BOSTON, LINGS.

Please mention THE GARDEN when writing.

**CHRYSANTHEMUMS**

We guarantee to give every satisfaction with the following selections.

	Per doz.
12 of the best new Japanese (1924) varieties	15/-
12 " " standard " " " "	5/-
12 " " incurved " " " "	5/-
12 " " decorative double varieties	4/-
12 " " singles " " " "	4/-

The above are for flowering inside from October until Xmas, and the following for flowering in the garden from August to October.

	Per doz.
12 of the best distinct double varieties	7/6
12 " " standard " " " "	4/-
12 " " single varieties " " " "	4/-

**PERPETUAL-FLOWERING CARNATIONS**

We have now for immediate delivery a large and varied stock ready for potting on, 12 of the best varieties ex 2-in. pots, 10/-; Carriage paid if cash with order. 50 in 25 varieties, 37/6, or 100 in 50 varieties, 70/-.

Catalogue or Novelty List sent post free from—

**KEITH LUXFORD & CO.**  
 Sheering Nurseries, HARLOW, ESSEX  
 and at Sawbridgeworth, Herts.

**KING'S ACRE CATALOGUES**

are convincing, original and interesting, and the personal service offered, embodies the principle of "*The little more and how much it is,*" which has made our name world famous.

**KING'S ACRE**

is the home of Horticultural Ideas, with trained, practical, experts specialising in all branches of Horticulture, each of whom is at your service.

**KING'S ACRE**

Nurseries are one hundred and forty acres in extent and were originally established in the year 1785. Our specialities have been awarded 87 GOLD MEDALS, a fact which testifies to the excellence of our stocks.

**KING'S ACRE**

should be consulted whenever you require either Useful or Ornamental additions for Garden or Estate. Your enquiries will receive immediate attention, and all information and catalogues are sent free on request.

*All enquiries to:—*

**KING'S ACRE NURSERIES, Ltd. HEREFORD****The Glen Road Iris Gardens**

SPECIALIZE IN RARE AND FINE  
 VARIETIES OF BEARDED IRISES

*Send for List*

Grace Sturtevant, Prop.  
 Wellesley Farms . Massachusetts . U.S.A.

**VIOLETS FOR BEDS, ROCK GARDENS AND NATURALIZING.**

MISS STANISTREET can supply now healthy young plants, properly selected and packed by an expert, from her Unique Collection of over 50 Varieties.

: : Descriptive List Free. : :

KILLALOE, CO. CLARE.

**WM. ARTINDALE & SON,**  
NURSEYMEN — SHEFFIELD

Winners of the

SIR ALBERT STEPHENSON SILVER CUP AT THE  
 SOUTHPORT FLORAL FETE FOR GLADIOLI

—CATALOGUES ON APPLICATION—

**SEEDS McHATTIES' SEEDS**

EXHIBITION SPECIALITIES

MASTERPIECE ONION . . . per pkt., 6d. & 1/-  
 IMMENSIVY RUNNER BEAN . . . per pint, 2/6  
 IMPERIAL EXHIBITION BROAD BEAN, per pint 1/-

The above are a few of our Scotch Strain for Show purposes. WRITE FOR LIST, post free.

McHATTIE & CO. Scotch Seed House, CHESTER

**J. BURRELL & CO.**

(ERNEST DONCASTER, F.R.H.S.)

RAISERS AND DISTRIBUTORS OF

**CHARM DAHLIAS**

THE DECORATIVE DAHLIA.

GREATEST WEALTH OF FLOWERS  
 OF MOST BEAUTIFUL COLOURS.

Standard kinds and Novelties for 1925

ALSO THE FINEST VARIETIES OF MOST APPROVED HABIT OF

**Cactus, Collarete, Decorative, Pæony-flowered and Pompon.**

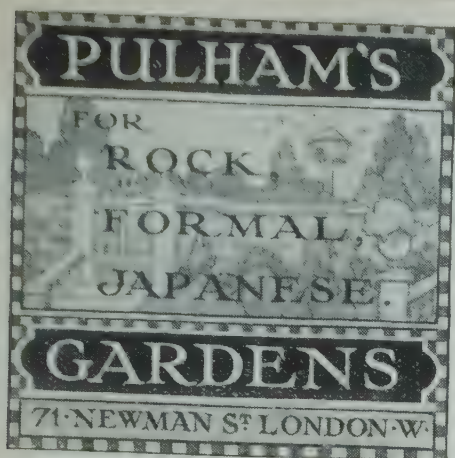
Collections of any of type . . . . . From 9/- per dozen.

*Descriptive Lists Post Free.*

**HOWE HOUSE NURSERIES, CAMBRIDGE.**

*Please mention THE GARDEN when writing.*





1925

CATALOGUE of  
Perpetual-Flowering

## CARNATIONS

If you are interested and would like a copy, post your name and full address to:

C. ENGELMANN, Ltd.,  
SAFFRON WALDEN, Essex

Please mention THE GARDEN when writing.

## WATTS' POLYANTHUS PRIMROSES

1st Class Certificate Nat. Prim. Society		
YELLOW	per pkt.	1/- 2/6
YELLOW and WHITE	"	1/- 2/6
WHITE	"	1/- 2/6
RED, CRIMSON and DARK	"	1/- 2/6
MIXED	"	1/- 2/6
BLUE and VIOLET	"	5/-

The Welsh Bulb Fields :: St. Asaph

Please mention THE GARDEN when writing.

**MANURES.** The most complete little book on the subject is "The Manual of Manures," by H. VENDELMANS, 4/5; by post, 4/9. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## Items of Interest from New Malden

A GREAT COLOUR  
SCHEME.

GLADIOLI with their blazing colours offer an opportunity almost unequalled. They are easy to grow, succeed anywhere; are suitable for cutting, and cheap. We offer varieties in red, white, yellow, cream, scarlet, pink, salmon.

1/6 per doz. 9/- per 100.

Write for Illustrated Catalogue.

HAMPTON PLANT CO.,  
7, New Malden, SURREY.

'Phone:  
Malden 330.

Bankers:  
Barclays.

Please mention THE GARDEN when writing.

# REAMSBOTTOM & CO'S GAYGARDEN ST. BRIGID ANEMONES

NONE GENUINE WITHOUT OUR GOLD MEDAL SEAL  
Wonderfully improved in Form and Colours.

FEW FLORAL SIGHTS CAN  
COMPARE WITH A GOOD  
BED OF THEM.

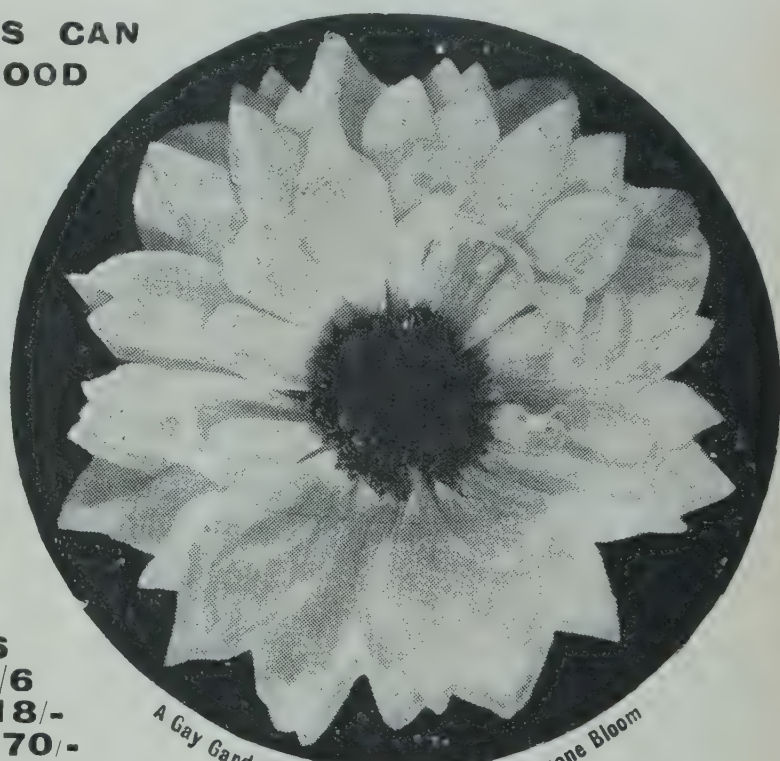
## PLANT NOW.

REAMSBOTTOM & CO.'S  
LATEST IMPROVED  
"GAYGARDEN"  
GOLD MEDAL ST.  
BRIGID ANEMONES

are the finest in the world.  
NONE ARE GENUINE WITH-  
OUT OUR GOLD MEDAL SEAL

12	..	..	..	3/-
24	..	..	..	5/6
50	..	..	..	9/6
100	..	..	..	18/-
1 000	..	..	..	170/-

Full Cultural Directions sent that  
will ensure success to every Amateur



A Gay Garden Gold Medal St. Brigid Anemone Bloom

## ALSO PLANT NOW

**DELIGHTFUL, FRAGRANT, SPRING-FLOWERING AURICULAS.** Lovely rich velvety colours, vastly superior to those usually seen. If you do not appreciate Auriculas, try ours, and you will be delighted. 6, 2/6; 4/9 doz.

**AQUILEGIA (COLUMBINE),** long-spurred. The shades and colourings of our special strain delight all purchasers. Selected, 6, 2/6; 12, 4/6.

**ASTER KING GEORGE (NEW).** Extra large-flowering Michaelmas Daisy; huge bluish-violet blooms, 1/6.

**MYOSOTIS ROYAL BLUE.** Dark intense electric blue; strong grower. 15, 1/6; 100, 7/6.

**MYOSOTIS VICTORIA.** (Hen and Chickens Forget-me-not). Sweetest little blue. 12, 1/6; 24, 2/9; 100, 8/6.

**CHRYSANthemum MAX. FIANCEE (NEW).** Showy new large white Ox-eye Daisy; strongly recommended, 1/-.

**LUPINUS POLYPHYLLUS.** Purple and white, 4, 1/3; 12, 3/-.

**FRAGRANT TREE LUPIN.** White. 2, 1/4; 6, 3/6.

**LUPINUS ROSEUS** (Pink Lupins). Our glorious strain of these hardy perennial Lupins, most lovely shades of pink. 2, 1/3; 6, 3/-.

**PHLOX EVELYN (NEW).** Large flowers and immense size, richest salmon-rose shade, an exquisite novelty, 1/6.

**PHLOX FIREGLOW (NEW),** huge trusses of brilliant orange-scarlet, with dark centre, 1/6.

For other varieties, also Roses, Fruit Trees, etc., please see our ILLUSTRATED CATALOGUE FREE. All Cash orders of 15/- value and over carriage paid or post free, packed by experienced hands. For Free Delivery, smaller orders, 5/-, 10/-, add respectively for Carriage or Postage, etc., 1/- and 1/9. Safe Arrival and Satisfaction Guaranteed.

## REAMSBOTTOM & CO.

Tower Nurseries, West Drayton, Middlesex (Also at Geashill, Ireland)

Please address to Tower Nurseries, WEST DRAYTON, and mention THE GARDEN when writing.

**PAPAVER KING GEORGE** (striking novelty), bright scarlet, with fimbriated petals. 1/3 each.

**PAPAVER MAHONY.** Chocolate colour, rare. 1/6.

**GAILLARDIA GRANDIFLORA.** Our splendid improved extra large-flowered; choicest rich yellow, with crimson or brown markings. 4, 1/4; 12, 3/6.

**GENTIANA ACAULIS.** The glorious Blue Gentian, prized wherever a hardy flower is grown. Very dwarf. Likes a loamy soil, with broken stones mixed through it. Extremely hardy. 3, 2/3; 12, 7/6.

**RED-HOT POKER, TRITOMA UVARIA.** One of the most noble autumn-blooming plants; the blooms resemble so many torches. 2, 1/4; 12, 7/6. Selected, 1/- each; 10/6 doz.

**PRIMULA OBCONICA GRANDIFLORA HYBRIDS.** Very beautiful Primulas; most valuable window or garden plants; never seen to be out of bloom, 3, 1/6; 6, 2/9; 12, 5/-.

**SWEET WILLIAMS.** Wonderful Giant Mixture. Our strain is a wonderful variety of colours, and customers are always delighted with the very large flowers. Giant mixture. 15, 1/9; 50, 5/-; 100, 9/6.

**DELWEISS.** This very hardy, much-sought-after alpine plant has pretty silvery foliage, with star-shaped, silvery flowers. 2, 1/3.

**HOLLYHOCKS.** Single Mixed. Our selection, mixed, strongly recommended. 6, 2/-; 12, 3/9.

**BERGAMOT (MONARDA DIDYMA).** The deliciously scented true fragrant Bergamot, with striking scarlet flowers, 2, 1/4.

**FREE MONEY SAVING BONUS COUPON.** — 20 per cent. worth of Additional Plants FREE and delivered carr. paid on orders over 15/- value if you enclose this coupon. — Quality superb. — T.G.



**FOR SPRING PLANTING**

THE EXECUTORS OF THE LATE

**ANTHONY WATERER**

BEG TO OFFER

**STANDARD TREES**  
in Great Variety

Consisting of:

**LIMES, PLANES, ELMS, etc.****EVERGREEN and DECIDUOUS**  
**SHRUBS, viz.:**

BOX, green and variegated, 3 to 8 ft.

HOLLIES, Common, 5 to 8 ft.

" Variegated and Green varieties, 2 to 6 ft.

THUIOPSIS BOREALIS, 10 to 12 ft.

CUPRESSUS LAWSONIANA, 12 to 14 ft.

SPRUCE FIRS, 6 to 8 ft.

CEDRUS ATLANTICA GLAUCA, very fine, 10 to 14 ft.

OSMANTHUS, PHILLYROEAS, SPIROEAS, LILACS,  
VIBURNUMS, etc.**GOLDEN YEWS**A magnificent Stock in all shapes and sizes from  
2 to 10 ft.

AZALEAS in great variety, 2 ft. to 8 ft.

RHODODENDRONS, without doubt the finest stock

in the trade of named varieties 2 to 6 and 8 ft.

RHODODENDRONS, Standards, in best named

varieties.  
HARDY HEATHS in great variety, and a good stock of  
General Nursery Stock.

CATALOGUES UPON APPLICATION.

Enquiries and Inspection invited.

**KNAP HILL NURSERY**  
**Woking Station :: SURREY**

Please mention THE GARDEN when writing.

**SPRING PLANTING.**THE PRESENT IS A GOOD TIME TO PLANT  
HARDY PERENNIALS, ALPINES, ORNAMENTAL  
TREES AND SHRUBS, CLIMBING PLANTS.

Large and varied stocks to offer in fine condition.

DESCRIPTIVE CATALOGUES and Special

Clearance Offers of Fruit Trees on application.

**THE BARNHAM NURSERIES, LIMITED,**  
**BARNHAM, SUSSEX.**

Please mention THE GARDEN when writing.

**FOR THE GREY GARDEN**

BEAUTIFUL LAVENDERS, ETC., for planting now.

Munstead, dwarf, bushy and free,

specially good 30/- per 100 250/- per 1,000

Old English - - - 35/- " 100

Grappenhall (tallest) - - - 35/- " 100

Cutch (silvery foliage) - - - 35/- " 100

Dotton - - - 50/- " 100

Catmint (Nepeta Mussin) - 25/- " 100

Rosemary, extra bushy - - 6/6 " doz.

Southernwood (Boy's Love) 1-1½ ft. 6/6 " doz.

Gum Cistus (C. laurifolius) 1-1½ ft. 10/6 " doz.

**YEWS! YEWS!! YEWS!!!**

18 Fine specimens, about 8-9 feet, very bushy and

transplanted but bare at bottoms for about 3 feet.

21/- each, the eighteen for £17

3 Ditto, ditto, 10-11 feet - - at 30/- each.

Come and see our Clipped Yews in Bird, Ball,

and many shapes, £5 5 0 to £26 5 0 each.

BAMBOOS in 37 species and varieties.

Cheap collections of Alpines, Perennials,

Water Plants. Catalogues Free.

HILLIER &amp; SONS, West Hill Nurseries, WINCHESTER.

Please mention THE GARDEN when writing.

**38th YEAR****MRS. PYM'S FAMOUS PLANTS**  
**AT REDUCED PRICES**4d. extra for orders under 3/-. 4/- worth gratis plants  
with every 20/- order. Small orders are sent post free,  
parcel post; large orders carriage paid, passenger  
train. Named, carefully packed and guaranteed to arrive  
in excellent condition. Cash with order. Stock your  
gardens with really excellent plantsStrong, choice, hardy transplanted perennials for  
flowering this year, for borders, beds, rockery, etc. Price  
per dozen; half and quarter dozen, same rate.

Achillea, double white, 3/6. Achillea, Cerise Queen, 4/6.

Agrostemma, bright crimson, 2/6. Alyssum Gold Dust,

3/-. Alyssum alpine, 5/-. Alpine Lychnis, crimson,

3/-. Alpine Pinks, creeping, white or pink, 4/-; mixed,

2/-. Alpine Wallflowers, orange, yellow or mauve, 1/-.

Anchusa, large blue, tall, 4/-. Anthemis Kelwayi, golden,

3/-. montana, white, 3/6. Anemone japonica, white or

pink, 6/-. Aquilegia, long-spurred, new art shades, 3/-.;

long-spurred, yellow, 3/6; double and single hybrids, 2/6.

Arabis, double white, 3/-. Alpine Aster, rockery, blue,

mauve or lilac, 6/-. Aster alpinus, lovely new pink-flower-

ing, for rockeries, 7/-. Aster Michaelmas Daisy, best new

large-flowering, named, all colours, 6/-. Aubrietia, rich

purple, 2/6; new large-flowering hybrids, 3/6. Auricula

alpina, superb varieties, 4/-. Brompton Stocks, giant

scarlet and mixed, 2/6. Campanulas, tall varieties, blue,

white or mauve, 5/-; dwarf blue or white for rockeries, 6/-.

Campanula pyramidalis (Chimney Bell-flower), blue or white,

2 years, 6/-. Canterbury Bells, single blue, white, pink,

mauve, 1/6; double, 2/6; Dean's hybrids, 1/9. Candytuft,

perennial, white or lilac, 4/-. Carnation, best double border,

scarlet, crimson, white, yellow grounds, 4/-; mixed colours,

3/-. Centaurea montana, large fringed blue, mauve, rose,

white, 3/-. Cheiranthus, yellow, orange, mauve, 1/-.

Chelone (Lobster Flower), 4/-. Chrysanthemums, mixed

double and single, 2/9. Chrysanthemum maximum (Giant

Moon Daisies), new named sorts, 2/6. Chinese Pinks, 2/-.

Cistus Rock, charming for rockeries, trails of lovely coloured

flowers 2/6. Coreopsis grandiflora, 3/-. Cornflowers, Kelway's

double blue, 1/6. Hardy Cyclamen, lovely for rockeries,

etc., large flowering bulbs, 8/-. Daisies, new bedding variety,

intensely double, enormous blooms, pink, white or crimson,

1/4; mixed, 1/- . Delphiniums, beautiful hybrids from best

named sorts, 2 year old, 9/-; 1 year, 6/-. Dianthus, splendid

for bedding, double or single, all colours, 2/- . Dianthus, for

rockeries, 2/6. Echinacea, new red Rudbeckia, 6/-. Erigeron,

(Mauve Marguerite), 3/6; Quakeress, 6/-. Erysimum, rockery,

Golden Gem, 1/- . Forget-me-Not, best dwarf, light or

dark blue, 1/- . Foxgloves, large mixed pink, etc., 1/6;

white, 2/-; new yellow, rare, 4/-. French Honeysuckle,

red, 4/-. Fuchsia, hardy crimson, 4/6. Funkia (Corfu

Lily), 6/-. Galtonia, handsome, white Spire Lily, 6/-.  
Geum Mrs. Bradshaw, 8/-. Geum Glory, fine double scarlet,6/-. Geum coccineum, improved scarlet, semi-double, 4/-.  
Gaillardia grandiflora, new large hybrids, 3/-. Gladiolus,

best large-flowering, large bulbs, 1/9. Gypsophila paniculata,

well known favourite, 6/-. Hemerocallis, grand large-flowering

hardy Japanese Lily, orange scarlet, yellow and tawny, large

roots, double 8/-; single, 5/-. Hollyhocks, Kelway's, double,

4/-; single, all shades of colour, 3/-. Honesty, 1/9. Iceland

Poppies, new large-flowering Excelsior strain, 3/6. Indian

Pinks, lovely colours, 2/-. Iris, large flag, white, mauve,

yellow, blue, purple, large blooms, 6/-. Isatis (Woad), rare,

3/-. Lavender, 2 year old bushes, 6/-. Lily of the Valley,

large flowering crowns, 3/-. Linum perenne (Blue Fairy Flax),

3/-. Lupin polyphyllus, blue, white, pink, large spikes, 2/6.

Tree Lupins, new Golden Queen, Snow Queen and grand new

hybrids in mauve shades, will grow 9 feet and covered with

fragrant bloom, 6/-. Lychnis chalcidonica, scarlet or salmon,

5/-. Malva bright pink, musk-scented, 3/-. Montbretia,

new, named, large-flowering sorts, 1/9. Pansies, bedding

varieties, all colours, separate or mixed, also best giant named

varieties, 1/4. Papaver Oriental Queen, enormous blooms,

4/-. Pentstemon, best large-flowering, 4/-. Periwinkle,

large blue, 4/-. Peas, Everlasting, red, pink or white, 6/-.  
Phlox, best large-flowering, separate colours, 6/-; mixed, 5/-.

Pinks, fragrant Pheasant-eye, double, semi-double and single,

all colours, splendid for cutting, 2/-; sweetly scented, old-

fashioned double white, 3/-. Polyanthus, Kelway's choice

mixed, 2/-. Potentilla, double crimson, etc., 4/-. Paeonies,

old favourite, enormous crimson and pink double blooms, large

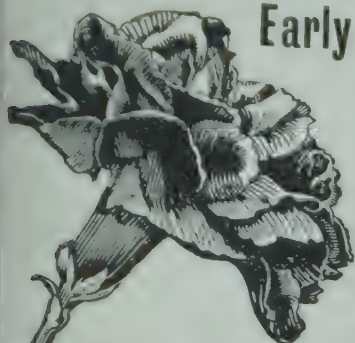
roots, 12/-. Paeonies, mixed colours, large roots, 8/-.  
Primulas, charming hardy varieties for borders, rockeries,waterside, pots, etc., 6/-. Pyrethrum, beautiful hybrids, 4/-.  
Rose Champion, 2/6. Rock Roses, 4/-. Rock Wallflowers,1/4. Sweet Rocket, white or mauve, 2/-. Rosemary bushes  
7/-. Rudbeckia, Newmanni speciosa, 6/-. Saponaria,  
ocymoides, trailing pink flowers, 3/-. Saxifrages, mossy,  
assorted, 5/-. Sunflower, perennial, Mrs. Mellish, etc., 3/-.  
Sweet Scabious, lovely colours, 3/-. Scabiosa caucasica,  
exquisite mauve, 6/-. Silene pendula, pink, 1/6. Silene  
Schafta, rockery perennial, pink, 6/-. Siberian Wallflowers,  
1/- . Solomon's Seal, for shady places, 3/-. Southernwood  
(Lad's Love), fragrant old favourite, 9/-. Stachys lanata.  
(Lamb's Wool), 3/-. Statice latifolia, tall lavender blue, 4/-.  
Sweet William, Kelway's new Scarlet Beauty, Pink Beauty,  
Crimson Beauty, 2/6; Dobbie's superb auricula-eyed and  
double and single hybrids, 1/6. Thalictrum, hardy Maiden-  
hair, 6/-. Thrift, pink flowering, compact growth, 2/6. Hardy  
Tiger Lilies, large, orange-red, black spots, 5/-. Tritoma (Red  
Hot Poker), 6/-. Tussilago (hardy winter Heliotrope), 4/-.  
Tunica Saxifraga, rockery or edging, 3/-. Valerian, old  
favourite, thrive anywhere, crimson or pink, 3/-. Verbascum,  
large, tall, golden-yellow, 4/6. Veronica spicata, tall blue,  
4/-; gentianoides, dwarf blue, 5/-. Viola cornuta, splendid  
for rockeries or border, Purple or Mauve Queen, Blue Perfection,  
Champion White, 1/9. Bedding Violas, Bath's Yellow Gem,  
Purple King, Imperial Blue, Snow Queen, 1/6. Violas, Maggie  
Mott, best, large mauve, strong rooted cuttings, 2/- per doz.,  
half and quarter doz. same rate. Wallflowers, all colours, 9d.**STRONG TRANSPLANTED PLANTS FOR COOL**  
**GREENHOUSE, &c.** Per dozen, half and quarter dozen  
same rate. Agapanthus (Blue African Lily), 6/-. Agatheia,  
(Blue Cape Aster), 4/-. Aralia (Fig Palm), 4/6. Arum Lily,  
1 year, 6/-. Asparagus Fern, trailing or erect, 6/-. Bella-  
donna Lilies, large fragrant pink blooms, flowering bulbs, 9/-.  
Cannas, Crozy's hybrids, 6/-. Celsia cretica, charming bright  
yellow and purple, 4/-. Cinerarias, exhibition strain, 3/-.  
Cyclamen, very choice strain, 6/-. Francoa (Bridal Wreath),  
5/-. Fuchsia, choice varieties, 4/-. Heliotrope, large fragrant,  
6/-. Hydrangea, best pink or white flowering, strong year-  
old rooted cuttings, 1/4 each. Nicotiana, white or crimson  
(Tobacco), 3/-. Passion Flower, 8/-. Plumbago, blue,  
1/4 each. Primula obconica, new giant crimson and rose  
shades, 6/-. Primula malacoides, favourite lilac, 4/-; kewensis,  
yellow, 4/-. Rehmannia, pink trumpet, 4/-. Spiræas, hand-  
some tall pink plumes, flowering roots, 10/-. Streptocarpus,  
magnificent new large-flowering hybrids, lovely colours, 6/-.  
Many others. Catalogue free.**STRONG HARDY CLIMBERS.**—Pyrus japonica, deep  
scarlet, handsome flowers for months, 3 years, 2/- each.  
Amelopsis Veitchii, self clinging, large 3 year old, 2/- each;  
2 year, 1/- each. Bignonia radicans, large red trumpet  
flower, 3 years, 2/- each. Clematis graveolens, yellow, scented,  
3 years, 2/6 each. Clematis Viticella, purple, 3 years, 2/6 each.  
Clematis Vitalba (Traveller's Joy), white, almond-scented,  
2 years, 2/- each. Clematis Flammula, fragrant, white (Virgin's  
Bower) 2 years, 2/- each. Eccecmocarpus (Chilian Glory  
Flower), clusters orange-red flowers, 1 year, 2 for 1/6. Honey-  
suckle, very fine, large, 2/- each.**STRONG, HARDY, CHOICE FLOWERING SHRUBS.**—  
Calycanthus, sweet-scented Anemone Tree, 1 year old, 1/6  
each. Caryopteris, blue spiræa shrub, 3 years, 1/9 each.  
Deutzia, double white or pink, 2 years, 1/6 each. Forsythia,  
covered in early spring with masses golden bells, 3 years, 2/-  
each. Ceanothus azureus, lovely bright blue tea plant, 3 years,  
2/6 each. Maidenhair Tree, graceful foliage, small 1 year,  
1/6 each. Hydrangea paniculata grandiflora, enormous heads,  
ivory white bloom, 2 years, 1/4 each. Ribes, blood red flower-  
ing currant shrub, 2 years, 1/6 each. Syringa, fragrant mock  
orange, lovely white blooms, 3 years, 2/- each. Sweet Briar,  
2 year bushes, 2/6 each. Spiræa Shrub, pink or red, 3 years,  
1/9 each. Guelder Rose (Snowball Tree), 3 years, 1/6 each.  
Pyrus japonica, rich red flowers for months, 3 years, 2/6 each.  
Weigelia, beautiful pink or crimson flowering shrub, mass  
of bloom all spring and autumn, 2 years, 2/- each.Many more. Send for New Catalogue, free on application.  
Magnificent Hardy Perennials, Rockery Plants, Spring  
Bedding Plants, Greenhouse Plants. Vegetable and  
Herb Plants. Hardy Climbers, etc.**MRS. PYM, F.R.H.S.****10, VINE HOUSE, WOODSTON, PETERBOROUGH**

Please mention THE GARDEN when writing.



# Plant CARNATIONS & ALLWOODII

Early for Best Results this year.



CATALOGUE of all Carnations for Garden and Greenhouse, also NEW COLOURS in Allwoodii, post free on request.

Special Collections at Carriage and Packing Paid prices:—

## HARDY PERPETUAL BORDER CARNATIONS

6 Plants, Distinct Varieties .. 15/-  
12 " " " .. 27/6

## ALLWOODII (Half Carnation, Half Pink)

6 Plants, Distinct Varieties .. 6/6  
12 " " " .. 12/-  
25 " " " .. 22/6  
6 Novelties " " .. 15/-

## CARNATION PERFUME.

ALLWOOD BROS. new and unique CARNATION PERFUME is stocked by leading Chemists at 1/6, 3/6, 5/-, 8/-, 10/-, and 15/- per bottle, or, in case of difficulty in procuring, direct from

*Allwood Bros*

The leading Carnation Specialists in the World.

Dept. 4, Haywards Heath, Sussex.

Please mention THE GARDEN when writing.

# Austins

## THE SCOTCH SEED HOUSE for QUALITY

We have during the past few years staged at the principal shows the finest exhibits of Garden Produce ever seen in Scotland and have received the highest awards, including the Gold Medal of the Royal Horticultural Society. We can confidently recommend our seeds as the finest strains in existence. See catalogues for particulars of vegetable seeds, also Sweet Peas, Antirrhinums, and all other Flower Seeds, Gladioli, Begonias, Lilliums, &c. Copies Free.

## AUSTIN & McASLAN

89, Mitchell Street, GLASGOW, G.1

Established 207 years.

# SEEDS

IF YOU WANT

## REALLY GOOD SEEDS

AT MODERATE PRICES

SEND TO

## ROBERT SYDENHAM LIMITED

99, TENBY STREET, BIRMINGHAM

No one will serve you better.

## SWEET PEAS A SPECIALITY

## THEIR UNIQUE LISTS

contain only the Best

VEGETABLES, FLOWERS AND

BULBS WORTH GROWING

Post free on application

## ROBERT SYDENHAM, LIMITED

Please mention THE GARDEN when writing.

# BEDALE ROSES, FRUITS AND HARDY PLANTS

Full descriptions in Catalogue, Free on Request. Mention "The Garden."

12 GIANT ORIENTAL POPPIES for 7/6  
Duplex, light scarlet, nearly full double; Joan Pybus, salmon-pink; Joyce, rich cerise shade; King George, scarlet, fringed; Mrs. Harkness, apricot-salmon; Mrs. Perry, salmon; Nancy, large deep crimson; Perry's White, pure white; Princess Ena (the Tulip Poppy); Princess Victoria Louise, rose-salmon; Rembrandt, brilliant scarlet; William of Orange, pretty light orange.

12 Giant-flowered Delphiniums. All named, choice varieties, 18/-

2 NEW ORIENTAL POPPIES  
Ethel Swete, brilliant rich cerise, distinct from all other shades. Received Award of Merit from R.H.S., London. 1/6 each; 15/- doz.  
Mrs. H. G. Stobart, brilliant cerise-pink, charming, good habit; both are vigorous growers. 1/6 each; 15/- doz.

Special Offer.—3 of each for 7/6. Carriage paid for cash with order.

12 Giant-flowered Delphiniums. Extra choice, best varieties, 30/-

## G. GIBSON & CO., LEEMING BAR, BEDALE

# SEED POTATOES

	Cwts.	56lbs.	28lbs.	14lbs.
May Queen	16/-	9/-	5/-	2/9
Duke of York	13/-	7/-	4/-	2/3
Midlothian Early	13/-	7/-	4/-	2/3
Sharpe's Express	11/-	7/-	4/-	2/3
Sir John Llewellyn	12/-	7/-	4/-	2/3
Eclipse	11/-	7/-	4/-	2/3
Sharpe's Victor	16/-	9/-	5/-	2/9
Epures	14/-	8/-	5/-	2/9
British Queen	11/-	7/-	4/-	2/3
Immune Ashleaf	14/-	8/-	4/-	2/-
Edzell Blue	18/-	10/-	5/-	2/6
King Edwards	9/-	5/-	3/-	1/6
Rhodoric Dhu	14/-	7/-	4/-	2/-
Ally	16/-	8/-	4/-	2/-
Great Scot	14/-	7/-	4/-	2/-
Kerr's Pink	14/-	7/-	4/-	2/-
Majestic	14/-	7/-	4/-	2/-
Tinwald Perfection	12/-	6/-	3/6	2/-
Golden Wonder	12/-	7/-	4/-	2/-
Arran Victory	18/-	10/-	5/-	2/6
Arran Chief	11/-	7/-	4/-	2/6

Sacks free Free on Rail Cash with order

SEND FOR LIST OF OTHER VARIETIES

J. W. CROSS POTATO GROWER Elm Road, WISBECH.

Try our "Marvel" Collection of dependable seeds for a 300 yards' plot, carriage paid for 5/- Potatoes excluded! Catalogue included!

UPSTONES, Seed Experts, ROTHERHAM

## CRISP'S PERENNIAL BROCCOLI

Lasts many years and gives a crop each year of from 5 to 12 good heads.

SOW SEED NOW, 1/- per Packet; or place your order for plants to be sent in May, 1/- per doz., 5/- per 100.

H. C. GROOM & CO., 5, Guilden Sutton, CHESTER

# NEW CHINESE RHODODENDRONS

A few superb hardy novelties. Plant in April & May

- R. Clementinae (Kingdon Ward 4177), white, suffused pink, darker markings. First discovered by G. Forrest in 1913. 4-5ins 7/6
- R. racemosum (Forrest 19404), pink. This is Forrest's finest form; a very suitable shrub for rock gardens or mass planting. 9-12ins. 7/6
- R. fastigiatum forma (Kingdon Ward 4456). Another fine dwarf species with deep purple flowers and crimson style. 12-16ins. 7/6
- R. muliense (Kingdon Ward 4023), bright sulphur yellow 9-12ins. 7/6
- R. cephalanthum Series (Kingdon Ward 3998), varying shades of a rose pink to milk white 7/6
- R. Arboreum Series (Kingdon Ward 3784), flowers of the deepest crimson. 6-12ins. 10/-
- R. Lapponicum Series (Kingdon Ward 4184), brilliant lavender-blue. 6ins. 7/6
- R. yunnanense (Kingdon Ward 4309-4322), bluish pink with brownish crimson markings, one of the best species for the ordinary garden, vigorous under almost any conditions. 8-12ins. 5/-
- R. fctolactum (Kingdon Ward 4509), pure white with a crimson blotch; magnificent foliage. Worthy of the best situations in the garden. 5-6ins. 10/-
- R. Virgatum Series (Kingdon Ward 4994) of the deepest pink hue; autumn flowering. 10-12ins. 5/-
- R. Delavayi (Kingdon Ward 3948), scarlet, with black glands. 9ins. 10/-
- R. Kingdon Ward 5001, flushed pale pink, winter flowering. 6 ins. 5/-

This fine set of twelve for £4 4s.

Full list of hundreds of new Rhododendrons on application. When ordering please mention this paper.

## HILLIER & SONS, Tree Specialists, WINCHESTER

Please mention THE GARDEN when writing.

# CAULIFLOWER

## "MAY QUEEN"

The fastest growing, quickest heading variety in existence. Planted now, large white heads may be cut during May and June. Plants, ready now, 3/6 for 100; 500 for 16/-; 1,000 for 30/-. Carr. paid. Packed in boxes, with cultural hints.

DANIELS & SON, WYMONDHAM, NORFOLK.

Please mention THE GARDEN when writing.

# BEGONIAS

In superb quality and extra large tubers for Greenhouse or Bedding.

DOUBLES, in 8 colours, flowers like large Roses and Camellias	6/- per doz.	42/- per 100
DOUBLES, in mixed colours	5/-	35/-
SINGLES, in 6 colours, very large fine shaped flowers	4/6	30/-
SINGLES, in mixed colours	3/6	24/-
SINGLES, frilled or crested, in 6 colours	5/-	35/-
SINGLES, frilled or crested, in mixed colours	4/-	28/-

Collections of 36 large tubers, 12-doubles, 12 singles, 12 frilled singles, 14/-

Post free on orders of 15/- and over.

Send for FREE Catalogue of named Double Begonias for Exhibition, Basket varieties, Cyclamen, Carnations, Delphiniums, Gloxinias, Polyanthus, etc.

## DELPHINIUMS

The ONLY collection to receive in 1924, the R.H.S. Gold Medal, the highest award obtainable.

Plant NOW. We have pleasure in offering the following Collections which are specially good value, in strong ground roots, which will make a fine show of bloom this year.

Collection A, 12 extra good sorts	65/-	Collection C, 12 fine sorts	30/-
" B, 12 very choice sorts	42/-	" D, 12 good sorts	22/-
Collection E, 12 average sorts	15/-		

Catalogue FREE. Apply

## BLACKMORE & LANGDON

BATH

Please mention THE GARDEN when writing.



GLADIOLUS

FIRST-SIZE BULBS.  
FINEST VARIETIES.

	per doz.	100
America, lilac rose .. ..	1/6	10/0
Baron Hulot, indigo blue ..	1/9	12/6
Glory of Holland, pure white	1/9	12/6
Golden West, orange-scarlet ..	1/9	12/6
Halley, delicate salmon-pink ..	1/6	10/6
Love's Fire, coral scarlet ..	2/6	17/6
Loveliness, creamy white ..	2/3	15/0
Niagara, nankeen-yellow ..	1/9	12/6
Panama, deep pink .. ..	1/9	12/6
Schwaben, soft yellow ..	1/9	12/6
War, deep blood red .. ..	1/9	12/6
White Giant, pure white ..	1/9	12/6
COLLECTION 100 in 10 varieties .. ..		13/6
„ 120 „ 12 „ .. ..		16/6
„ 240 „ 12 „ .. ..		30/0
Primulinus Hybrids ..	1/5	10/6

All Bulbs Carriage Paid. Catalogue Free.

WM. POWER & CO.,  
WATERFORD.

Please mention THE GARDEN when writing.

DOBBIE'S  
DAHLIAS

OUR DAHLIAS have a world-wide reputation, and our collection is unsurpassed for all that is really worth growing in their respective classes.

Plants may be had from now onwards till June—the earlier for potting on, the later for planting out direct.

Place orders at once and say when required.

Any class: Collarette, Cactus, Decorative, Pæony, Pompon, Show, Single, Dwarf Bedders.

Plants from Pots: 10 for 6/3; 20 for 11/6; 30 for 17/3; 40 for 21/-; 50 for 25/6; 100 for 48/-. Cash with order.

Our Selection. Carriage Paid.  
Catalogues on Application.

DOBBIE & Co., Ltd.,  
Royal Florists,  
EDINBURGH.

Please mention THE GARDEN when writing.

Notes from Maidstone.

DELPHINIUMS

It is still safe to plant Delphiniums. Our List, which will be sent post free contains all the best varieties, such as Rev. Lascelles, The Alake, King of Delphiniums, Mrs. Shirley, Mrs. Townley Parker, Lord Derby; while the beautiful nemophila blue Queen Mary is now offered at the special price of 2/6 each, as we have worked up a good stock.

IRIS may still be planted, and we shall be pleased to send our List.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Maidstone.

Established 1796.

No. 6



The  
Cricket Club  
Secretary

Men who appreciate

The  
**ATCO**  
MOTOR MOWER

In the letter reproduced above the Secretary of one of many Cricket Clubs using the ATCO Motor Mower expresses his opinion of the machine. Let us prove ATCO claims by arranging a free demonstration on your own grass without obligation.

16 inch Model £50 22 in. Model £75. 30 in. Model £95  
Personally Delivered and Guaranteed 12 months

Send for free booklets, "Turf Needs" and "Notes of Praise."

CHAS. H. PUGH, Limited  
Whitworth Works, 31, Tilton Road, BIRMINGHAM

April 1, 24.

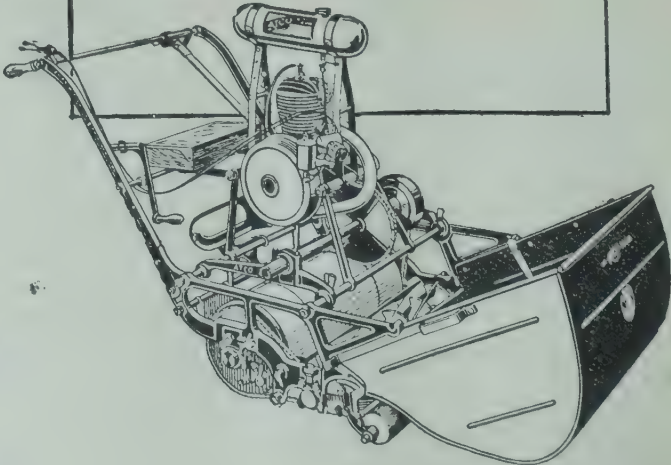
Ugbrooke,  
Chudleigh,  
S. Devon.

Dear Sirs,

You may be interested to see from enclosed report that your Atco Mower has been a great success and a saving compared with horse hire. Our ground has been selected for a County Trial match - on account of its excellent condition; this is mainly due to your machine. I saw your Cultivator attachment while at Olympia last month - and have a leaflet about it. Can you give me particulars as to price? I am anxious to get one, but could we pay by instalments as we are not a rich club and could not run to a big outlay now.

Yours truly,

G. Hamrick







VOL. LXXXIX.—No. 2786.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2.  
Entered as Second-class Matter at the New York, N.Y., Post Office.  
Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.

APRIL 11, 1925.

## A FEW NAMES

**F**OR my own edification, I have lately been looking up the origin of some of the weird names that are tacked on to plants coming from eastern Asia. As these names may be puzzling to readers of *THE GARDEN*, I give a few origins which are derivative from foreign explorers in the East.

*Albrechtii* (*Rhododendron Albrechtii*).—Dr. Albrecht, a Russian Naval surgeon, born in 1821, spent six years in Hakodate in Japan, where he made large collections.

*Bungeana* (*Pinus Bungeana*).—Dr. Alexander von Bunge, an eminent Russian botanist, born in 1805, was sent to Peking as a botanist in 1830. He collected extensively in the Peking plain until he quarrelled with the Chinese authorities, who forbade him to go outside the walls of the city.

*Davidi* (*Acer Davidi*).—The Abbé David, the earliest of the three great French missionaries to whom we owe so many of our Chinese plants. He joined the Mission of the Lazarists in Peking in 1862. He made three notable journeys, the first in 1866 to southern Mongolia; the second, 1868-70, in central China and eastern Tibet; the third, from 1872-74, through Chili, Honan, Shansi and Kansu. All these three journeys were north of the Yangtze.

*Decaisnea* (*Decaisnea Fargesii*).—Decaisne was a skilled Belgian horticulturist born in 1809, after whom J. D. Hooker called a new genus.

*Delavayi* (*Magnolia Delavayi*).—Père Delavay arrived in China in 1867. Collected in Hupeh, Szechuan and Yunnan, but principally in the latter. M. Franchet recounts how he received specimens of over 4,000 species from this indefatigable botanist.

*Desfontainea* (*Desfontainea spinosa*).—1750-1833. Desfontains, Professor of Botany of the Royal Garden, Paris. A new genus was called after him in 1794.

*Fargesii* (*Rhododendron Fargesii*).—Père Farges, a French missionary who collected in north-eastern Szechuan and in Shansi from 1892 onwards.

*Maackia* (*Maackia amurensis*).—Maack, Professor of Natural Sciences at Irkutsk in 1852. Travelled widely in Eastern Siberia.

*Maximowiczii* (*Primula Maximowiczii*).—Dr. Carl Maximowicz. The most prominent botanist that Russia has

produced, born in 1827. Travelled in Mongolia, Manchuria and Japan.

*Potanini* (*Rhus Potanini*).—Grigori Nicolaevitch Potanin, one of the most eminent of all Russian travellers. Made four great journeys in Mongolia and north-western China and Tibet from 1876 to 1894. In early life he became head of a curious Siberian conspiracy which aimed at setting up Siberia as a separate kingdom. For this he spent six years as a convict. Probably his best known introduction was *Rheum Alexandræ*, called after his wife.

*Schlippenbachii* (*Rhododendron Schlippenbachii*).—Called after Schlippenbach, a Russian naval officer whose only claim to fame is that this fine rhododendron was called after him. A rhododendron by any other name was just as sweet.

*Thunbergii* (*Berberis Thunbergii*).—Thunberg was a famous Swedish Professor of Botany, who lived from 1743-1822 and wrote the "Flora Japonica."

*Weyrichii* (*Rhododendron Weyrichii*).—Dr. Weyrich, a medical officer in the Russian navy in the middle of the last century. He botanised in the Far East wherever his boat took him.

One other name that bothered me was "tangutica," which is the specific name of several well known plants, among them *Clematis tangutica*. As far as I can make out, the Tanguts is an old name for a tribe which either inhabits or used to inhabit that undefined corner where Tibet joins China on the one side and Mongolia on the other.

I have left out a few names, like *Przewalski*, when the plants called after them are very uncommon. Some of those names are almost human, but I feel better about even the worst of them now that I have found out that those whose names they were supposed to perpetuate actually lived at some time or another.

E. H. M. C.

AMONG OTHER ARTICLES IN OUR NEXT  
ISSUE WILL BE:

OLD-FASHIONED FLOWERS.

ALPINE PLANTS FOR THE GREENHOUSE, by J. T. Harris.

BULB NOTES, by the Rev. J. Jacob.

THE MODERN GLADIOLUS, by Chas. W. J. Unwin.



# FRAGRANCE in the SPRING GARDEN

IN THIS ARTICLE THE AUTHOR DESCRIBES A FEW PLANTS WHICH SHOULD BE INCLUDED IN ALL GARDENS FOR THE SAKE OF THEIR FRAGRANCE DURING THE SPRING MONTHS.

FRAGRANCE—that sweet, subtle, indefinable grace—is necessary throughout the whole of the garden if it is to live and linger in the memory as a place of beauty and charm. And, in writing “throughout,” we make no exceptions whatever. In the kitchen garden we demand our fragrant herbs—our lavender and lemon thyme. In the shrubbery, our delicate bay, daphne and other sweets. In the rose garden, our sweet briar and perfumed roses—and so the story goes on through every bed and border, a complete chain of separate, distinct—sometimes blended—but never competing scents.

Fragrance in some directions is in danger of becoming lost, and it is up to some of us to see that this precious heritage from the past is not lightly cast aside for mere size or colour or other beauties that please the eye but fail to make the slightest appeal of scent. This is the case with far too many of our popular modern varieties of the rose and the sweet pea, while Nature herself, possibly in a fit of pique or as a punishment, has withdrawn the perfume from the musk, which used to run almost as a wilding in the memory garden of our childhood's days.

Especially do we demand fragrance in the evening garden, when in the grateful coolness of the dusk we wander once more along the flowery paths to drink in great wafts of the perfume of the old time white jasmine, the tobacco flower and the all-penetrating and all-pervading night-scented stock. The latter is a wonder, and a broad breadth of it sown near the room that is chiefly occupied during the evening is a delight, both indoors and out, for many months. Nothing could be simpler than this, for all one has to do is to rake over the surface soil in early April, scatter the seed thinly, gently pat the soil, and we shall soon have a bountiful crop of tiny seedlings that

give so poor an impression of their future possibilities. The capacity is there, however, and those slender-looking plants are going to branch and branch until not a speck of bare ground is visible and the tops are literally smothered with a tangle



THE SPRING SNOWFLAKE, *LEUCOJUM VERNUM*, LOOKS WELL IN CLUMPS.

of the tiny starry pinkish purple flowers that advertise their presence over the whole garden. Another, less powerful, but by no means to be despised, evening perfume comes from the evening primrose that so regularly expands its huge primrose flowers each evening by taking off the pointed cap and unrolling the closely packed petals. Among the many day-scented flowers that become more odorous at night may be mentioned the lilies, and especially those later-flowering forms *auratum* and *speciosum*. These are indeed only open air flowers, for, if one cuts and brings them within doors, the perfume soon becomes so powerful as to be unpleasant.

Let us, however, be systematic and not drift into generalities. Spring, opening its welcome to the year of flowers, is a very important time and, happily, bulbous and other flowers may be found in plenty that will add their quota of perfume to the rapidly accumulating treasures that are expanding upon all hands. Many of these are old-world plants, too, that thereby add an extra charm to the scene. Are there not the jonquils, most fragrant of the smaller narcissi; the poeticus and double white, again both full of delightful perfume, and no less attractive from the floral point of view? Equally valuable and considerably earlier is the hyacinth, a flower that loses all its stiffness when brought into the house and skilfully arranged with sufficient suitable foliage. The colour range is so wide and varied, too, that kinds may be chosen that will “fit in” with any possible scheme of colour decoration. Wallflowers are a host in themselves, and I have yet to meet the person who did not at once fall a victim to their charms and sniff—and sniff again—at the delicious odour that seems to typify all that is best in a real spring day. Plant these generously in broad sweeps and drifts, not in niggling little beds, and you will gain in every way, for not only will the garden be a blaze of rich satisfying colour and fragrance, alive with humming bees, but there will be no lack of the best possible material for the vases and to give away.

Among the earliest fragrant flowers of spring comes the *Daphne Mezereum*, to find which we must visit the shrubbery. Here, in a protected spot before January has passed, it is often possible to cut long stems of these gloriously scented blooms, a few of which suffice to fill a whole room. Following hard upon the heels of this comes the wonderful *Iris reticulata*. This flowers—more or less—according to the season in February, although in a backward year I have known it to be early April before the first blooms expanded. The colour of the flowers, one upon a stem, is violet-purple heavily reticulated, with darker veins of a similar colour and a vivid orange stain in the middle of each fall. In order to encourage the earliest



WALLFLOWERS, RICH IN COLOUR AND FRAGRANCE.



flowering, a sunny and well protected position should be afforded, while a well drained soil is absolutely essential. Rich soil must be avoided, as it encourages rank growth and, when this occurs, flowers are sparse because the bulbs fail to ripen fully. As an edging to large or small borders—it is only a question of varying the width of the planting—*Milla uniflora* is excellent and has the advantage of, unlike so many bulbous flowers blooming successionally for some time. The English name, spring star flower, conveys a very fair impression of the blooms, which are white, shaded with blue and deliciously scented. Yet another bulbous subject, which is rarely met with in gardens, is a variety of the muscari—*moschatum* or musc-scented hyacinth. This is not at all a conspicuous flower, for the little spikes of bells are greyish purple that fades off to yellowish brown, but the perfume is powerful and well justifies the name of musk hyacinth.

Still among the bulbs, the poetaz narcissi are splendidly fragrant flowers that have abundantly vindicated their claim to complete hardiness. With the older polyanthus bunch-flowered narcissi it is a gamble whether one will get one's flowers or whether frost will nip them; but with the poetaz varieties one is quite sure. Size, colour, clearness of eye and fragrance are all beyond praise, and small groups disposed here and there in the borders make a most effective addition to our range of fragrant spring beauties. Polyanthus in mixture, whether in patches in the borders, as edgings or entire fillings for beds, etc., are so well known that no more need be said, for their spring-like fragrance is also abundantly appreciated. Stronger and more distinct than this in its delicate perfume is the auricula, another of the vast primula family, and he who owns a rich supply of these may certainly congratulate himself on the possession of a double store of treasure, for nothing else quite equals the glorious velvety texture and wonderfully rich colourings that are to be found in this best of all spring flowers for the hardy garden. A coarse-growing and common old plant that is, however, by no means devoid of scent and that gives wonderful cascades of snowy white flowers is *Arabis albidiflora*, but it should never be forgotten that this is such a rampant grower that it is only suitable for certain places in the garden where its smothering capacity cannot act to the detriment of other and choicer plants. Like a giant snowdrop, *Leucojum vernum* (the spring snowflake) is worth extensive planting, and may well appear in bold clumps in the rock garden, the shrubbery and the mixed border,



MYRRHIS ODORATA, SWEET CICELY WITH GRACEFUL HABIT AND FINE FOLIAGE.

wherever a touch of spring is desired. The drooping white flowers, touched with green at the tips of the petals, are a delight for cutting, and it is when used within doors that the delightful fragrance may be best appreciated.

Among the later spring-flowering bulbous rooted plants one finds a most unusual tulip that deserves to be far better known, for it is not costly and goes on year after year with no further attention than the preliminary planting. It is quite dwarf in stature, not more than 3 ins., but even at this produces several fragrant flowers on each stem. A very sunny place should be allotted to the bulbs, for the flowers only expand when this is shining. The colour on the outside of the petals is golden bronze, while the inside is deep buttercup yellow, forming a very striking patch when the blooms are widely expanded into stars in the warm sunlight. One mentions *Myrrhis odorata* among the fragrances of spring because that is when it begins to flower, although this is carried on into early summer, and even after that one has the value of the graceful habit and the deeply divided leaves.

Before we realise that spring is passing we glide imperceptibly into the world of early summer, when the Spanish iris, the rockets and the pinks begin to expand and fill the air with new and delicious odours; but perfumes increase so rapidly just then and the number of varieties is so great that we must leave their consideration for a further article.

H. W. CANNING-WRIGHT.

## THE "CHARM" DAHLIAS

If you get simple beauty and nought else,  
You get about the best thing God invents.

ROBERT BROWNING.

THE simple beauty of the "Charm" dahlia is its greatest attraction. There is a single or double row of ray florets, a yellow disc, a wide range of pretty and in some instances almost indescribable shades and a thin, rigid flower stalk which gives grace to every bloom and makes it an invaluable subject for decorative purposes. There is no perfume—we do not expect it in a dahlia. I like, too, the simple beauty of the name. The word "Charm" fits the flower exactly. It is as delightful in the garden as it is when tastefully arranged in the room. To call them "Charms" is much more acceptable than to use the rather formal term of miniature peony-flowered dahlias. When this type was first introduced—and no person has worked more assiduously in their evolution and perfection than my good friend, Mr. Ernest Doncaster—there were many critics who scoffed at the idea of the "Charms" becoming popular. "We can obtain equally good flowers," said these critics, "from any mixed

packet of dahlia seed." This idea is an illusion. The increasing popularity of the "Charms" is a practical answer to such an assertion.

An open site that is well sheltered from the prevailing winds suits the "Charms" admirably. The ground may be forked over some weeks before planting time and a liberal supply of well decayed animal manure worked into the soil at the same time. A sprinkling of bone meal and superphosphate is also beneficial. If time or circumstances do not permit of such preparation being done, all that is necessary to ensure success is to mark out the position of each plant and dig out a hole about 2 ft. deep and fork into the lower spit of this a spadeful of manure, with a handful of artificials scattered in as the soil is replaced. Planting out may be done any time between the third week in May to the beginning of June. Early plantings are advisable, as the plants benefit by the favourable growing conditions of late May or early June. Firm planting is necessary. Usually the young plants are received from the nurseries thoroughly hardened and ready for their permanent quarters, and in most cases they are sent



with the ball of soil intact. The plants do not show much visible change for the first few weeks after planting, but when once they become established they make rapid growth and necessary staking and tying should be done so that winds will not damage the sappy shoots. Ordinary bamboo canes are stout enough for supports as the plants seldom attain a height of more than 4ft. The average height is about 3ft. and the weight of the plant is not as heavy as the larger-flowered types.

All the "Charms" are free flowering, some of them being very floriferous. All faded flowers and seed vessels must be removed regularly in order to obtain a continued display of bloom. The plants will commence to flower in July, and if well grown will produce an abundance of bloom until the frosts cut them down. Some of the popular kinds, and in some cases the cheaper ones, are among the most beautiful, so that even a modest outlay will be many times repaid. Two of the prettiest of these—the forerunners of the race—are Norah Bell and Our Annie. Norah Bell is a lovely bright cerise on a yellow ground, a colour that is brilliant in sunshine and exquisite under lamp-light. The nearest colour in flowers that I can compare it with is the beautiful Cottage Tulip Cassandra. Our Annie is a soft shade of shrimp pink on a yellow ground. The yellow ground "Charms" are all delightful in artificial light, besides being attractive colours in the garden.

Little Edie, a different type of bloom from Our Annie, has much of the latter's beautiful colouring. It is a dwarf, bushy plant, and at its best is always a mass of bloom. Picture is another well known variety. The colour is very difficult to describe, chestnut and flame on a gold ground is the nearest approach, but there are many other pleasing shades intermingled in its colour composition. It is a variety that only needs to be seen to be admired. Gladys Unwin, another very free flowering type and a plant with a good constitution, is one of the best pinks. The distinct lemon zone in the centre lights up the flower and gives it an added charm. Elegance is a soft, silvery rose-pink, a very delicate colour, and the blooms are very freely produced. Rosie is a deep pink, but the colouring is soft and pleasing. This is also very floriferous. Trixie is an orange scarlet self, a colour that is somewhat like the early Tulip Prince of Austria. It makes a bold splash of colour and is one of the brightest for garden display. Crimson Glow is another rich self, an intense deep crimson. The flowers are freely produced and the stems are erect, strong and of great length. Dazzle is a brilliant scarlet that is consistently good. The flowers are of medium size and are carried erect on very rigid stems. This is a good variety for bedding or massing. Fusee is a softer coloured Norah Bell, one of the loveliest for room decoration in artificial light. It is very free-flowering and the stems are wiry. Other useful standard varieties include Bertha, bright rose suffused with crimson at the base, one of the freest of the "Charms"; Epoch, a brilliant scarlet flame with rosy tips; Jess, orange suffused with scarlet, a fine erect grower; Judith, rust red, an uncommon colour; Kenneth, a beautiful shade of pink; Marcella, a glowing rose with a golden base; The General, a distinct shade of madder crimson; and The Quest, crimson-scarlet with a yellow base.

I have had the privilege of growing several of the novelties in advance and the new varieties that were offered last spring have had two season's tests in my garden. Most of these are great advances both in colour, type and habit. Three of the 1924 introductions stand out prominently. These are Charmer, Dennys and Amos. Charmer is one of the finest, if not the best "Charm" in cultivation. It fully deserves the award of merit which it received at the Wisley Trials last year. The predominating colour changes from orange-chestnut to orange-salmon overlaid on a rosy ground. It is impossible to give an accurate idea of the wonderful colour blend.

The flowers are well formed, of great lasting qualities, and they are freely produced on erect, rigid stems. Dennys is a glowing orange-scarlet self. There is more scarlet in it than Trixie and it is quite a different colour. It is a nearer approach to vermilion. There is a beautiful gloss on the petals and a bunch of this variety is positively dazzling. It has a perfect habit and is very free flowering. Amos is rather larger than the ordinary type, but it is such a perfectly proportioned flower, and the brilliant crimson-scarlet colour is reminiscent of our best velvety-crimson roses. This is one of the most brilliant "Charms" we have. Three other 1924 introductions are almost as fine as the foregoing. These are Mac, Peach and Betty. Mac is an art shade of fawny salmon on a yellow ground. It is a bold, well formed flower and the blooms are held erect on good stems. It has a vigorous constitution and its perfect habit makes it a good subject for garden decoration, while there is no more pleasing colour for artificial light. Peach is a delicate rose on a lemon ground. The centre of the flower, where the lemon base is more pronounced, and the dainty wire edge of crimson on each petal give it a soft and beautiful effect. Betty is a silvery lavender-lilac. Last season it was particularly good in colour here, and although it is not a colour for lamp-light, it makes a good contrast in the garden, and it is quite distinct. Lillah, a deep pink with white tips on each petal, a perfectly formed flower, and Leonie, a light rosy pink with a yellow zone, are both attractive new shades.

I have tried all the best novelties of 1925, and there are some excellent additions among them. Emily is the best yellow "Charm" to date. It is a pure shade of primrose yellow with paler tips. It has a fine erect habit. Electron is a yellow ground overlaid with brilliant orange-crimson, the tips of the florets being suffused with violet. When the sun shines on this variety it seems to light up the flowers. It is so free that as many as fifty flowers can be counted on a plant at one time. Chameleon, as the name suggests, changes its colour from salmon-orange to rosy-orange and later paling to rosy buff tinged with orange. It is a fine flower of the "Charmer" type. Emma is the nearest approach to a white. Except that the base is slightly tinted with pale sulphur yellow it is virtually a self. Angelina is a brilliant shade of coppery orange toned with scarlet and orange crimson. It is a free-flowering variety of the "Picture" type. Kitty is a soft rosy pink with the centre of the petals slightly suffused with crimson. The base is chocolate-maroon. It has a free branching habit and is very useful for cutting, as the blooms

will last for eight or nine days in subdued light. Lucina opens an apricot buff and changes to reddish salmon. It is a distinct and pleasing colour and is very pretty in artificial light. Mary is a brilliant maroon crimson, the darkest "Charm" yet raised. It is a fine colour and reliable in all other respects.

The blooms are at the right stage for cutting when the second row of disc florets are opening. For brilliant effects use orange scarlet, pure scarlet or crimson. Any of the pinks, more particularly those where the yellow or lemon zone is clearly defined, are suitable for table decoration. The cerise and salmon cerise shades are seen at their best when placed near the source of artificial light. Yellows may be seen in small proportion with the richer shades of pink. A mixed vase is quite pretty, but carefully arranged groups give the best effect. The flowers do not need foliage or grasses mixed among them. These rather spoil their beauty. The spikes should never be crowded. A dozen sprays will be quite sufficient for an ordinary vase. A rose bowl makes an admirable receptacle. There is no autumn flower more useful for decorative work than the "Charm" dahlia, by reason of their wealth and variety of colour.

NORMAN LAMBERT.



A TYPICAL "CHARM" DAHLIA.



## EUCRYPHIA CORDIFOLIA

**I**N many gardens, even in localities particularly suitable for the less hardy shrubs, considerable difficulty is experienced in establishing this beautiful, but somewhat tender tree, or shrub. Stunted, leaderless plants are common, and this when the site has been well chosen and prepared. What is the reason? After examining many such plants, I am forced to the conclusion that very few ever get a fair start. Autumn planting, with wintry conditions following before the plant is established or protected is responsible for many failures. Planting unprepared plants, such as have been grown closely together in shaded houses, is another cause. Again, a plant may be pot bound and the roots inactive when it is planted, with the result that time is lost and growth commences too late in summer and is not matured before frosts occur. There is also the question of varying hardiness in individual plants. This would not affect those rooted from cuttings in the same degree, but seedlings vary considerably, some grow away with a distinct lead and very vigorous foliage, and are at three years old, 18 ins. in height. The majority form neat, well branched little trees of 10 ins. to 12 ins. Others, the dwarfs, grow slowly and only attain 6 ins. in height in the time stated. Curiously enough the free-growing plants appear to be the hardiest. Loss of the leading shoot by frost may cause some plants to branch freely, but in most the difference in habit is due to seed variation. Such plants, where they succeed, will make beautiful shrubs no doubt, but never stately specimens. When the latter are desired, good plants, grown with as little check as possible, should be chosen.

In a mild season like the present the roots should be active and if it is intended to plant out into a permanent position in April, no time should be lost in giving a liberal increase in pot room. A mixture of two parts loam, half a part leaf-mould, half a part peat and a good sprinkling of sand, makes a suitable compost. Pot moderately firm and place in a cool house or pit, inure to outside conditions previous to planting out in the middle of April.

A somewhat sheltered but sunny place should be chosen. Soils which suit rhododendrons, well drained light loams, and those of a peaty nature appear most suitable. Double dig the ground, a space 6 ft. each way is none too much, forking in leaf-mould and sandy peat if necessary. Examine the plant; vigorous roots should now be pushing through the new soil, be careful not to injure them or break the ball, plant and stake at once, making the soil firm below, leaving a good tilth on the surface.

In young plants, growth is rarely finished before November and the points are often browned and sometimes killed by frosts. The best method of protection is to mulch the ground over the roots with leaf-mould or even cinder ashes, and, using five or six bean sticks, make a "wigwam" over the plant, tying the tops of the sticks together some distance above it. Then cover all but one quarter, that on the sunny side, with a

Russian mat. Arrange a flap, to be tied across the opening in severe weather. Protecting tender trees and shrubs is often of doubtful utility, but in this case it means all the difference



A BEAUTIFUL FLOWERING SPRAY OF EUCRYPHIA CORDIFOLIA.

between success and failure. When the stem has attained some solidity and is well protected by ample foliage, it is not so necessary.  
J. COMBER.

## THE CULTIVATION OF THE VIOLET

**T**HE humble violet with its sweet scent and lovely colour will always be welcome. This year violets have been very plentiful, and the sight of so many of these much-loved flowers must make some people wish that they were growing them in their own gardens. Those who contemplate doing so should begin now, and by next autumn they will reap the reward of their labours during the summer. Undersized and poor flowers can be produced practically anywhere and by the most incompetent gardener, but to get the very best a certain amount of care and understanding of the needs of the violet are essential. It takes skill to produce flowers during the dull dark days of winter, and also to keep up a succession of bloom from September to April.

First of all, the violet must have sunshine and air. The smoke-laden atmosphere of a town is fatal to them. Not only are the flowers meagre and scarce, but the leaves are few in number. Fog also is most injurious. Very often violets are planted in a shady position, whereas an open sunny situation where the crowns of the plants can be well ripened, is one which the violet loves. Slight shading during the very hottest part of the summer is helpful, but directly the days are cooler the violets should be fully exposed once again. Unfortunately, red spider is likely to be troublesome in a sunny position, but this difficulty can be overcome and should not hinder anyone from planting in an open situation.

Violets succeed better in some soils than in others, but on the whole they

are not particular. A good medium loam is ideal, but other soils can be made suitable by the addition of manure or leaf-soil and by well working the land. A really heavy soil must be drained, as good fibrous roots are not made in a water-logged soil, and without them the plants are not healthy. Any material which will improve the physical condition, such as a good dressing of lime, should be added to a clay soil. Leaf-mould, cow manure or farmyard manure will improve sandy soils and help to keep the roots of plants in a light soil cool and moist during the summer. Violets do not in nature grow in a soil heavily charged with manure, but in a soil rich in humus. Large quantities of manure cause the flowers to be few and far between. Old mushroom manure



or the remains of a hot-bed are excellent additions to the violet site.

To produce first-class violets, good stock is essential. Any grower, who has not up to the present been successful with his violets, should begin again with fresh stock. Those who are starting for the first time should purchase young rooted crown runners from a reliable grower who specialises in violets. A good beginning is half the battle.

Single, double and Parma violets are, with a few exceptions, treated in the same way. Annual propagation is the best method, and if possible fresh quarters should be given each year. Cuttings of single violets can be taken in spring and in the autumn, or the old plants may be pulled to pieces directly after flowering and replanted in prepared beds. A limited number of plants should be set aside for stock plants each year and allowed to develop runners. Vigorous outside cuttings with good roots from the best plants should be selected. When all the cuttings are gathered

planting outside. In all cases it is advisable to plant the violets as soon as possible, as they are then able to withstand drought more easily during the summer. Until they are established no attention need be given; but, after that, weeding, hoeing and watering must be done regularly. All through the summer the runners should be nipped off so that strong individual flowering clumps will have formed by the autumn. Autumn-struck cuttings sometimes root more easily, as there are no drying winds then. A few plants can be allowed to develop runners; these will provide cuttings for striking in the autumn in frames. Liberal supplies of water should be given in dry weather, and the plants must be syringed frequently to keep down red spider, and if this pest attacks the plants, syringe with paraffin emulsion. Every fortnight a weak dose of liquid manure should be given. In this way fine clumps will be formed.

There are two seasons of flowering, from September until the nights are

the lights on for the first fourteen days. During these first days some ventilation and shading should be given to prevent the leaves from flagging. When the violets have become established, remove the lights and do not replace until the nights turn cold, and even then a little air should be given at night and plenty during the day. In frosty weather cover the lights with mats at night as a means of protection.

Throughout the winter all decayed leaves should be picked off and the soil stirred with a hand fork every fortnight. Violets will need very little water during the dead months, and great care must be taken that they do not suffer from damp. If damp does get in, sprinkle a mixture of powdered lime and charcoal round the plants and in the crown. Ventilate whenever possible, especially as spring advances.

There are a number of good varieties of violets, and to keep up a succession of bloom several kinds should be grown. Undoubtedly the best all-round variety



A GOOD VARIETY FOR OUTSIDE CULTURE, PRINCESS OF WALES.



MARIE LOUISE, WITH BEAUTIFUL DEEP BLUE FLOWERS.

together they should be prepared before planting by removing any inferior leaves and cutting off the runners. After this they should be planted with a trowel in well dug beds manured the previous autumn, placing them 14-16 ins. apart each way for the singles and 12 ins. for the doubles. It is very important that the cuttings should be planted *firmly*, but the crown must not be buried. When the young plants are given a pull they should not come out of the soil. To ensure firm planting, the ground should not be spongy to start with. Rolling with a wooden roller or treading consolidates the soil.

Parma violets are usually propagated by division of the old plants in spring as soon as flowering is over, and strong outside crowns only should be used. About 10 ins. apart in the beds is sufficient distance for planting the Parma violet. Runners can be taken off in March and inserted in boxes and placed in a cold frame. These should be kept growing well, and in six or eight weeks' time they will have formed good plants for

frosty, and then again during February and March. To obtain bloom from November to January some means of protection is necessary. Portable frames can be placed over the rows, but moving the plants into frames where they can get as much warmth as possible is the better method. This protection during the winter does away with the chances of damage by rain. At the beginning of September the Parma violets are lifted and at the end of the month or early in October the singles. If there are any flower-buds showing at this time, they should be picked off. The frames should be well drained and contain a fairly rich compost, and the ground should be made firm before planting. A frame in which cucumbers have been grown is quite suitable for violets during the winter. The day before lifting soak the violets well. Take up with a large ball of soil, remove all dead leaves, and plant firmly in the frames and near the glass. The plants should be 12 ins. apart and the crown must not be below the soil. Water immediately and place

for outside or for frame culture is Princess of Wales. Admiral Avellan is a good deep amethyst variety. Mrs. Lloyd George has dark violet flowers with a coloured rosette in the middle of each. Baroness de Rothschild has a particularly large purplish violet flower. Cœur d'Alsace is grown because of its pinkish red flowers, which are so different from the usual violet colour. The flowers are not large, but they are sweetly scented and continuous blooming. White Czar is the best white violet, it has small well shaped flowers. All the above varieties are singles.

The well known varieties of Parma violets are still the best. Marie Louise has a beautiful deep blue flower with a streak of red in the centre. Duchesse de Parma, although a rather pale blue, is worth growing owing to its sweet fragrance. Mrs. J. J. Astor is a large-flowered dark amethyst variety; and Mrs. Arthur is dark blue with a white centre. Comte de Brazza is an excellent white Parma violet and is very fragrant.



# HOW TO MAKE A PRIVATE GARDEN PAY

IT IS THE AIM OF THE MAJORITY OF GARDENERS AND OWNERS OF GARDENS TO MAKE THE GARDEN AS PROFITABLE AS POSSIBLE WHILE RETAINING ITS BEAUTY AND GRACE. IN THIS, AND THE FOLLOWING ARTICLES, THE WRITER SUGGESTS CERTAIN CROPS WHICH MAY BE TRIED WITH A VIEW TO MAKING THE PRIVATE GARDEN A PAYING PROPOSITION.

**I**N these days of depreciated investments and tight money generally, many owners of large and medium sized estates are directing their attention to the commercial possibilities of utilising surplus garden produce.

In many country places I know of, gardeners are chosen for their commercial as well as technical training, and through them very useful alterations have been made by diverting establishment charges into profitable channels, and, in addition to supplying the owner with all his requirements, the gardens have been made to pay their own way.

Let me say at once that no acts of vandalism are necessary; there is not the slightest need to destroy the beauty of any garden by making it pay. Some re-arrangement will be needed in the nature of the crops, cultural treatment will differ too, somewhat, since medium-sized fruit, flowers or vegetables will be the aim rather than a few exhibition specimens.

It is possible to some extent to mix the purely ornamental with the prosaic commercial sections, more especially with flowers; but forced salads and vegetables, as well as outdoor fruit crops, must be segregated from the domestic sections, for they will pay well for the extra attention afforded. Correct successions must be maintained, for the essence of good marketing is to secure and maintain a market reputation, and this can only be successfully accomplished by maintaining a continuity of supply of high-grade goods.

The adoption of my suggestions may mean the elimination of unprofitable varieties, especially in fruit and flowers, substituting other kinds just as beautiful but possessed of a definite market value. The intensive and continuous use of hot-beds, heated frames and greenhouses, together with the right use of all by-products, will be involved.

I propose to deal with the main sections individually and from a commercial standpoint, but the amateur may safely follow in practice the cultural instructions given. He will differ only in that he may wish to add types and varieties which would ordinarily have no place in a commercially conducted garden.

Before I go into cultural details, I would like to warn my readers against trying to compete with the commercial grower of the commoner necessities, such as potatoes, cabbages and the like. The aim should be to take very full advantage of sheltered positions, soil, and the general intensive conditions of the private garden.

## GROW CHOICE THINGS OUT OF SEASON.

Tackle that which, by the very nature of things, the grower in a large way cannot. Forced strawberries, asparagus,

seakale, mushrooms, beans, mint, lettuce and new potatoes are all in very great demand on the market, and are extremely profitable. I have, from quite a tiny cucumber house, sent



DAFFODILS READY FOR PACKING FOR MARKET.

Note how this is carried out with all the heads at one end.

large quantities of forced mint to Covent Garden in February, March and April, and have received from 12s. to 15s. per dozen bunches—and remember that mint can be cut four times, given correct treatment. Ten shillings per pound for forced beans is not at all an unusual figure, and I have made more during a shortage of French sendings. New potatoes at from 2s. 6d. to 3s. per pound show a good profit, with not a very large or exorbitant outlay. Careful attention to detail and an intelligent appreciation of the market fluctuations are all that is necessary, all other things being equal. I shall endeavour to make the articles as topical as possible, so that those intending to try may do so at once. The first subject to be dealt with is bulbs and flowers. If, as we go along, difficulties crop up or something is not quite clear, I should like to know, so that all readers may benefit by the reply.

More useful information is acquired through intelligent discussion and constructive criticism than in almost any other way. Further, each district, and almost each garden, has its own special problems of which I cannot be cognisant when writing in general terms. I shall welcome these particular problems, for principles may always be applied and adjusted to local conditions in gardening as much as anything; the rule of thumb means stagnation and horticultural mediocrity.

## BULBS AND FLOWERS.

Of all the forms of commercial horticulture, this is, I think, the most profitable and interesting. There is always a steady demand for British bloom right up to the end of March and April, and the keen gardener will see that a succession of flowers is maintained right through the season, commencing from Christmas. For the purposes of this article, I am assuming that no bulbs are being bought in specifically for forcing, and will deal



PLANTING OUT MINT CUTTINGS IN PREPARED BEDS.



with the subject right from the commencement when the bulbs are being planted, up to the time the flowers are ready for market.

Preparations have to be made a year ahead, and the bulbs for forcing in the winter of 1925 are now planted and growing. To commence operations it is necessary either to buy or lift a stock of "mother" bulbs during the month of July or August. Most gardeners know what a "mother" bulb is. Commercially it is one which has been planted down for three years and has developed from a single "offset" to a group of tightly packed small bulbs. It is the large flat-sided offsets which are planted down for forcing. After the main beds of bulbs have been lifted, they are left on the surface of the ground to dry and ripen. When first lifted, the offsets are very tightly fixed to the parent bulb, and it would cause great injury to divide them at this time. A few days' drying causes them partially to break away, and a little hand assistance then is all that is necessary. They must never be forcibly removed, or irreparable injury will be caused to the root plate. When all the bulbs have been graded, there will be found four sizes and types, no matter what variety of bulb is being treated. First come the parent bulbs from which the offsets have been removed, then the large offsets, then more a little smaller, and finally tiny little bulbils. The last may be thrown away, or planted in some woodland place, for they will take many years to mature into flowering bulbs. All the others must be planted into raised beds in their separate grades. The beds are very like asparagus beds, and about 6ft. wide. This is to allow flower picking from each side of the bed without stepping on it. The parent bulbs will flower in the season following planting, and at the same time grow into round bulbs fit for forcing or planting down for three years for stock purposes. The large offset may flower, but, at the same time, will become round and suitable for forcing in the following year. The smaller offsets must be planted a little deeper—about 5ins.—and remain for two years before being fit to lift again. So it will be seen that the life history of a bulb involves three years; but as soon as established, all is plain sailing. From the commercial point of view, the beauty of bulb and flower growing is that all the time revenue is coming in in the form of flowers, one's capital in the form of bulbs is steadily appreciating. During the months of August and September the round bulbs will be boxed or potted ready for forcing, and then should be plunged either in beds of fine soil or ashes until the time comes to bring them into heated greenhouses. This time should be determined only by the condition of the bulbs and not by the time of the year. I have seen more failures in forcing through bringing in the boxes prematurely than through any other cause. The flower should just be emerging through the neck of the bulb before heat is applied, and then it will stand any reasonable amount. If brought under glass too soon, then the foliage takes the lead and maintains it throughout, while the flower becomes stunted and deformed and quite useless for market. It will be found that all the polyanthus narcissi, such as, for example, Soleil d'Or, will stand much more heat than will the Ajax or trumpet kinds. Here we may leave them until the flower spikes are well up in the sheaths and the head of the bloom is just "crooking" over and the petals commencing to open. It is at this stage that the difference as between commercial and private work is obvious. The flowers must be picked now, if it is intended to market them, for they will have to undergo a period of development under cool conditions so that they may "harden" and have their natural colour intensified. While still green, therefore, and long before they are fully opened, bloom should be picked, in the early morning, and taken at once to a cool, sunny and light place and be placed in water tied up in bunches of two or three dozens, loosely tied up in bunches of three to four dozens. All having been picked, they should be taken out and put in either in a cool sunny glass house or shed. They must, of course, be put in water.

After a twelve hours' drink a remarkable change will have taken place. The blooms will have partially opened, and will be firm and a little on the green side. It is at this stage that the grower should market the bloom, and in no case when it is fully developed. It should be remembered that it has to travel to the market, be exposed for sale, it may then have to go on another long journey to some provincial town, and the retailer then has to keep it for a day or two in his shop. *The flowers should not be fully developed even when they reach the*

*retailer*, for he has to consider the consumer, naturally, and will invariably pay a higher price for that which will last longest.

Exactly the same procedure is followed with the outdoor bloom, with the exception that the buds should be a little more developed before being picked.

#### MARKETING THE FLOWERS.

Flowers grown in a private garden should be a much better grade than the ordinary commercially grown bloom, and this being so, Covent Garden Market will form the best outlet for them. Higher prices are paid in this market for high-grade material than any other market in the world. After the flowers have been tied up in bunches of one dozen blooms, they should be packed in non-returnable wooden boxes which any salesman will supply. According to the variety of flower, the number of bunches in a box will vary. The packer should not be afraid of packing the bloom firmly; far more harm is done by loose packing than otherwise. With most of the trumpet varieties of daffodils it will be found that two layers of a dozen bunches in a layer will be quite satisfactory. The heads of the bunches should all be packed at one end of the box, in order to display the length of stem, and a light wood "cleet" should be firmly wedged over the stems to keep them rigid in transit.

Before packing, the stems should be quite dry, and this will necessitate taking the bunches out of water at least two hours before packing, and standing them upright on a draining board. Pack early in the morning of the day of despatch and advise the salesman the night before of the quantity and variety of your consignment. Better prices are always obtainable when the salesman knows what to expect, and after he gets to know your "mark" (as it is called on the market) your sendings may be sold at the very highest market prices before they have arrived. Such is the value of a good market reputation. Here are some of the best commercial varieties of daffodils and narcissi to grow. There are many hundreds of other varieties, and some are much more beautiful than those given, but, as they are not well known on the market, it is too much of a gamble to recommend them.

#### COMMERCIAL VARIETIES OF BULBS TO GROW.

The amateur in flower growing is very apt to want to indulge in too many varieties, with the result that he has a great number of small consignments which are anathema to the salesman. It is far better to have larger quantities of fewer kinds. Remember that each variety should be sent in dozens of bunches, or multiples of a dozen. Odd bunches are a nuisance and cause endless trouble in the sales returns. Here, then, is a short list with which the beginner might make a good start by obtaining, say, 20wt. of each variety. They would, of course, be purchased at wholesale rates and "as lifted," which means that all the offsets, "mother" bulbs and so on will be included, and will be graded out before planting by the purchaser.

SOLEIL D'OR.—Good for warm climates, such as Guernsey, Scilly or Cornwall. Very good forcer.

GOLDEN SPUR.—The best commercial daffodil. First-class forcer.

PRINCEPS.—A good bicolor daffodil and a good forcer.

EMPEROR.—A well known market variety and will force.

EMPRESS.—Ditto (bicolor).

BICOLOR VICTORIA.—Ditto (bicolor).

KING ALFRED.—First-class market variety. Forces well. Large daffodil.

BARRII CONSPICUUS.—Heavy cropper. Will not force.

POETICUS ORNATUS.—Best known commercial narcissus. Fine forcer.

HORACE.—Beautiful flower—makes good money always. Bad forcer.

SIR WATKIN.—Good commercial daffodil. Always in demand. Forcer.

FRANK MILES.—A sturdy Incomparabilis type, will not force well.

LUCIFER.—Ditto.

C. J. BACKHOUSE.—Ditto.

RECURVUS.—Useful for Easter work, and very hardy. Good forcer.

DOUBLE WHITE.—A late Easter flower, and therefore very valuable where it will do.

In my next article I shall deal with glass house work from the viewpoint of growing commercially profitable crops.

SIDNEY P. WELLS.



## FLOWERS BY THE SEA

THERE are numerous owners of villas with small gardens near the sea which are only used for weekends and during a few months in the summer, and where, perhaps, the services of a jobbing gardener are only employed occasionally to tidy up. During most of the year the plants in the beds and borders have practically to take care of themselves.

My idea in writing these notes is to recommend a few varieties of hardy plants which, with very little attention, will make a good show during the summer and early autumn.

It is as well to remember that soil near the sea is generally of a sandy and "hungry" nature and dries out very quickly; consequently, the ground must be well prepared if the plants are to be successfully grown. Before planting, trench the soil at least 2ft. deep, and work in plenty of good rotten manure.

The chief drawbacks to being near the sea are the strong winds which are experienced at all times of the year, and more especially during the early spring months. Therefore, unless the garden is situated in a sheltered position, it is useless to plant tall-growing varieties. Speaking from my own experience, those I recommend do really well and, if properly planted in the first instance, will afterwards take care of themselves and not require to be shifted for at least two or three years.

When planting a border of hardy flowers it is as well to allow plenty of space between the plants. Perennials such as Canterbury bells and sweet williams, which only flower one year, may be dotted in between, and bulbs such as gladioli and *Hyacinthus candicans* may also be planted in the spring. Some of the favourite annuals, such as mignonette, cornflower and larkspurs, should be sown. These look gay during the summer and are very little trouble.

Three flowering shrubs which do well are *Forsythia Fortunei*, with drooping yellow flowers freely produced during

April. *Olearia macrodonta*, a distinct shrub with cut silvery leaves and sweetly scented white flowers, and *Spiraea Anthony Waterer*, a compact shrub with large heads of bright crimson flowers.

The following hardy plants are a few I recommend, although, of course, there are many others:

*Achillea Perry's White*.

*Aquilegia*.—Long-spurred hybrids.

Michaelmas Daisies (Asters).—Ideal (pale lavender), Delight (white), Lil Fardell (silvery rose).

*Campanula persicifolia*. C. p. alba.

*Gaillardia*.—Lady Rolleston, The King Geum. — Mrs. Bradshaw, Mr. John Bradshaw.

*Gypsophila paniculata flore plena*.

*Helenium*.—Riverton Gem.

*Iberis gibraltarica* (very suitable for edging).

*Iris*.—Amas, Aurea, Caprice, Cordelia, Gagus, Kitty Reuthe.

*Nepeta Mussini* (catmint).

Peony.—Mme. Eugène Verdier, Albert Crousse.

Phlox.—Elizabeth Campbell (a lovely salmon-pink), Regulus.



OLEARIA MACRODONTA, A DISTINCT AND SUITABLE SHRUB FOR SEASIDE GARDENS.

*Chrysanthemum maximum*.—Mayfield Giant, Mrs. C. Lothian Bell.

*Erigeron*.—B. Ladhams.

*Scabiosa caucasica*.

The tallest of the above varieties only grows to a height of 3½ft. A. G.

## VEGETABLES THAT ARE FLOWERS

WHEN your friends have finished showing you over the flower garden they are apt to say, "I don't expect you'd care to see the kitchen garden," but I always say, "You've seen the flowers, but now you *must* see my vegetables."

The difference between vegetables and flowers is not intrinsic in their nature, but one of the curious arbitrary classifications that man forces upon mere things. Flowers are plants which we cultivate for their beauty alone, while vegetables are plants which produce something edible: for example, the root of the parsnip, the bottom of the stem of onions, the top of the stem of asparagus, the buds of Brussels sprouts, the leaf stalk of celery, the leaves of spinach, the flowers of the globe artichoke, the fruit of the tomato, the seeds of caraway. By adding all these parts a composite, but complete, plant could be produced. Into this wooden scheme there is no consideration of any other factor than utility. That vegetables should be regarded as flowers because of their beauty appears to some minds an upsetting of the laws of seemliness.

It is a curious lack of balance in many people that they put beauty in one place and utility in another; this is an entirely modern conception, but there are a few exceptions;

nobody seems to deny that a calf is delightful because it produces veal, or a baby chick any the less fluffy and lovable because it may grow into a boiling fowl or lay an egg. Those who think that beauty and utility are enemies should all be sent to the Tower, not to be beheaded, or even imprisoned, but to see the fine designs that are on cannon, coat of mail, halberd, strong boxes and many other objects which were clearly made for use.

A field of cabbages may be ugly, a field of cabbage stalks is undoubtedly an eyesore, but individually each cabbage is a huge green Victorian posy, and I am sorry that I am not big enough to put one in my buttonhole. In remote country gardens there are still flowers called "cabbage roses." With a little wise planning the gardener never need go into the garden and find it without its "cabbage posy." Cabbage is most attractive when the dew is still on it, for it is a plant that flags sadly in a dry warm atmosphere; so to see this flower at its best you must, in summertime, be up early.

What variety there is between January and December! The curly green kale of the early year has the grace and variegated outline of a fern, and during the grey winter days its vivid green is as gay as any red rose in June. Spring cabbage



is attractive because of the smoothness of its leaves, the inner ones having a texture like fine green satin. Purple sprouting broccoli is a kind of solid gypsophila, suitable for cold weather; it has lovely rich colours and its crisp and succulent stems are covered with a delicate lavender down. The bloom is as fine as that on a bunch of grapes and has the advantage that its beauty is within the reach of anyone who has a piece of garden.

One kind of cabbage posy succeeds another, and after some months we find the cream-coloured cauliflower, which some far-away, wise human being did dare to call a flower; its creamy white is set in a frame of green, rather like a mass of whipped cream in a green bowl.

The Old Year ends and the New Year begins with Brussels sprouts, little heads of fat men and women who have been caught by some witch and fastened to a stalk for their sins of over-indulgence, for how could they be so fat unless they had over-indulged? To make their punishment complete they are set out in a frozen garden, are bent over by snow and made to glisten by hoar frost. But in spite of their presumed discomforts, the little, fat, green men and women continue to grin and be jolly.

Nor must cabbages be forgotten in autumn, when frost and sun paint the outer leaves with red, orange and purple. Then mists keep a fine dew all day long on the reddened leaves and even the laziest gardener can see the posy cabbage at its best.

Next you must see the rows of waving plume-like carrots, fine and feathery from the first moment in which they so miraculously push their way through the hard brown soil until the first autumn frosts turn them into yellow-red. All the summer they have been like plants growing under the sea. I thought I looked down through blue-green water and saw the fine leaflets tossed here and there by the movements of the waves, but when autumn has begoddened the leaves they cease to be sea flowers that the mermaids pick and fix in their tresses, and become solid plants that live in solid earth. When the sun-coloured carrots are pulled out of the brown earth to serve as human fodder, it seems a pity that the fine green leaves, the lovely fine bunch of feathers that each carrot wears on top of his head, should have to be cut off and thrown away. Carrots are all men, but they bring a touch of femininity, or perhaps it is savagery, into their lives by their gay and delicate headdress.

Come down the walk that has a border of parsley, fine big plants of parsley which from their childhood have had plenty of space to grow in. Here is a notice in gardener's language that the missus is not bullied on this estate. Well grown parsley has a greenness that suggests intense gaiety; it outdoes the grass and promises an infinite succession of springs. If only it would never go to seed. The plant spreads out like a great green rosette, pale at the centre, deep green at the edge, each leaf placed exactly in the right place by a master designer. The mossiness of the newer parsleys is so soft and so rich that it does not seem quite at home out of doors. The plant seems to make an insistent demand that a leaf from the perfect rosette should be plucked to deck a piece of cream cheese, an anchovy sandwich or slices of smoked salmon. When properly dried on a sunny windy day it preserves its greenness and perkiness to the end.

Over there are the lettuces. To-day I cannot look at the cos: they are not flowers, but prim, hard-hearted spinsters who look as if they were trying to save their souls and be respectable. They can't even be of any use unless they are policed into their duty by being tied up! But the wonderful cabbage lettuce was invented by some wise labourer to make his garden lovely. Each leaf is a solidified wave of the sea, the outer green, the inner almost white; they stretch up into the air and curl about one another. Each lettuce is a lovely flower filled with secrets. The curling leaves embrace each other tightly in the cool, fragrant chambers where they dwell. But they will be spoilt if you let these lovely flowers grow into seeding vegetables.

How different is the asparagus bed. In its youth it is just a patch of delectable vegetables, rather desolate and unattractive looking, but when it has ceased to be useful it becomes a garden for the little woodland men and women who leave the gaily-coloured but rather solid flower beds to dance here under the fine leaves. The tiniest wind bends these plants; if we had better hearing perhaps we should discover that a thin sweet music sounded up and down this green bed.

It seems a little incongruous that such a delicate growth with its tiny flowers should produce a conspicuous, flaunting red berry. Perhaps the berries are compliments to the full-coloured summer sun, little lanterns that the woodland people hang up as offerings to the god of summer.

Beyond the asparagus we reach the sea kale bed, where palmate leaves grow cheerfully out of a bed of cinders. This is an exotic-looking plant and gives the garden a new colour, a misty greenish grey. The little curls and contortions of the edge are a combination of the laughs and grimaces which the leaf makes at each passer-by. It laughs because it does so well in spite of its cinder bed and its home away here in the damp and cold, and it also makes a grimace at you for having brought it to the north and made it a prisoner. It is bold because it is related to the pirates and buccaneers who sailed for so many centuries along the coasts of the Mediterranean. How plant and pirate are related cannot be known for certain, but probably a lazy pirate was turned into a sea kale, just as Adonis was changed into a flower and Arachne into a spider.

Another sea plant that has made a home with us is the rich red beetroot. Call them by some other name and we'd pick the leaves to put in vases in the house and plant them in the gaily coloured formal beds of big gardens and parks. The lovely leaves have a way of changing with the weather and the amount of moisture in the air, and become green, purple, red, grey, but they are always rich and beautiful. The modelling of the leaves is fine and the texture smooth and satiny.

It is a pity that potatoes do not blossom more frequently, as the purple or white flowers are very *chic* and attractive. Potato leaves are only nice after they have been sprayed with the blue-green disease killer, so it is the lady's "make-up" and not the lady herself who is admired. The potato itself is such a rough-looking customer that the dainty flower it bears seems hardly to belong to it. It is like an Apache passing off a lovely stolen child as its own. The prettiest part of the potato flower is the little beak of golden stamens which protrude out of the circle of white or purple petals.

For the last I'll save the best and most beautiful plant, the green or globe artichoke, which is grown so little but which might be cultivated in almost every garden in the southern and central counties. Its leaves are familiar to all in the acanthus decoration which we copied from the Greeks and which we know so well on the capitals of churches, theatres and town halls. It is a leaf that does not require modification, for it is perfect both in nature and in art. The down which is so abundant on the young leaves and the stalks gives it a soft appearance, but the beauty here is not texture or colour, but line.

Soon after the woolly frond has made its way into the air, its tip begins to bend earthwards; at first the curve is slight, but with increase of size the curve grows stronger and finally the tip may touch the ground, but in the whole progress from upright frond to procumbent leaf the curve is always fine, noble and alluring. The edge of the leaf is cut irregularly, but the cuts are not fussy like those of the sea kale or gauche like those of the dandelion. The cuts are clear, decisive, strong. At first the two sides of the leaf are close together, but as they grow they separate a little, then gradually open wide, each side making a fine curve outwards from the mid-rib. There is a great satisfaction in this leaf—a noble curve from base to tip and two graceful curves from midrib to edge, and the leaf is large enough to give a feeling of opulence in beauty. Nature in this plant does not give a tiny peep at loveliness as in a solitary pasque flower on the Downs, the sparse milkwort on an upland pasture, a tiny heartsease springing out of a hard baked field: but here are riches spread abundantly.

Inch by inch the stalk grows until it has reached five, six, seven feet, and as it ascends it sends off branches which bear the buds, cup-shaped like a thistle but without such unfriendly prickles. The green scale leaves, often tipped with purple, hold at their base that tiny morsel of food so delicious to the lover of artichokes and in the heart of the cup is hidden away the delectable *fond d'artichant*. If the garden is lucky enough to have a little rising ground, that is where the artichoke must grow for the sake of seeing its billowing leaves and curved cups undulating against the sky.

It has taken a year to see the vegetables; a year sounds so long, but it is only a very little piece out of Time. Rest just a moment and then we can start again.

O. A. MERRITT HAWKES.



# POTATO GROWING AND INCOME TAX

BY A LAWYER.

GROWERS AND MERCHANTS.

A SOMEWHAT unusual question, of much importance in relation to the assessment of income tax of potato growers and merchants has lately been the subject of the close consideration of the High Court. The facts were quite simple. A firm of wholesale potato growers and merchants hired land under certain special conditions for the purpose of growing potatoes. They were in possession of the land in some cases for more than a year, and in other cases for less than a year, and the actual land used by them was changed each season. Their landlords, who were local farmers, did the ploughing and carting and provided the horse labour required, and the landlords were paid an agreed rate for rent and another sum, at so much per acre, for the provision of the necessary horse labour, etc., the amount paid being inclusive of all rates and taxes. The landlords were, however, assessed to income tax, Schedule "B" for the land, and not the potato merchants. The latter sold the potatoes grown by them under this arrangement and were assessed to Schedule "D," in London, where they carried on their business as potato salesmen, in respect of the profits which they got from this business in potatoes. The Inspector of Taxes contended that this was a profit which arose from the growing and sale of the potatoes, and not a profit arising from the occupation of the land.

OCCUPATION OF THE LAND.

The real point for the Court, therefore, was whether, under their agreement,

these potato growers and merchants were, in fact, in occupation of the land in question. Under their agreement they were to have possession of the land until the potatoes were fully ripe and in fit condition to be stored in pits, and, in addition, they were entitled to certain rights of possession for the purpose of pitting their seed and storing their crops in pits until such time as the crop was sold and removed in the ordinary course of trade. The potato growers provided so much artificial potato manure to the acre, and the manual labour, except as previously mentioned. It was found, upon the facts, that the whole year and the whole value of the soil to grow anything was devoted to potatoes.

"USE" OF THE LAND.

What, therefore, was the use of the land for the particular year? The landlords, who, as stated, were farmers, let the potato growers the land as their tenants, and gave them possession of the land for their purposes. That being so the Court came to the conclusion that the growing of these potatoes was the only profit there was in the land. The Court also accepted the view that if the ordinary farmer grew potatoes, and took them, say, to London and sold them there, he would not be treated as commencing a new business from the time he took his crops from his farm on the way to market, although different considerations might apply to a farmer carrying on a butcher's shop, or anything of that sort. The fact, therefore, that these potato growers were also wholesale

potato merchants and salesmen did not make them liable to be assessed to income tax under Schedule "D" in respect of the profits made by growing potatoes on the basis that this was subordinate to their business of potato merchants and salesmen. They were rightly assessable under Schedule "B" in respect of the occupation of land, and not their landlords, the farmers, although the latter were, in fact, the rated occupiers.

A NEW POINT.

It would not appear that any previous cases were of much assistance in settling the question involved, the decision in which is of great importance to those interested, for it would seem that a large profit had been obtained, making a great deal of difference if the assessment had been maintained under Schedule "D" instead of Schedule "B." The whole subject opens up a wide question for people who rent land for similar purposes and can justify their right to being assessed under "B," as occupiers of the land, under a working arrangement of this kind with the farmers from whom they rent, rather than being driven to be assessed under "D" on the profits of their businesses. It is true that in a bad year, with a loss in trading, they might be better off if assessed under "D"; but with a very considerable profit, as in the present case, there can be no question of the great advantage which is secured by an assessment under "B" in this kind of undertaking. The judgment has now been confirmed by the Court of Appeal.

## THE AMATEUR FLOWER SHOW

(Continued from page 193.)

I AM glad to see flowering shrubs encouraged by giving them the next two classes, 14 and 15.

Many of the best kinds will have finished blooming, but where good collections are grown there should not be much difficulty in finding six or twelve varieties, and kinds may not be impossible. As no mention is made of hardiness we shall probably find some choice subjects from the climatically favoured parts of the country. The weather will play a part in the "timing" of certain species.

Watering will be almost certain to assist flower development and will be especially valuable shortly before the show.

The next group, cut flowers of herbaceous plants, will strongly appeal. A star indicates that bulbous and rhizomatous plants may be included. This will admit some of the choice lilliums and irises.

Bulbs are readily obtainable now and no time must be lost in potting, if wanted. A frame will be suitable for them till growth is active, when a greenhouse would be best. Shade from strong sunshine is essential, also manure waterings when well rooted and green fly must be guarded against. It is doubtful whether any of the June-flowering irises will be left, but the lovely *I. Kämpferi* should be in season. It is not too late to plant strong roots now in good rich soil, and

when growth commences an abundance of water will be imperative to success.

The main point in most cases will be surface working of the soil, mulching, watering, thinning and staking where necessary.

Classes 18 and 19 are for pot plants grown under glass.

There is also a separate class for foliage plants only, but in the above classes both flowering and foliage plants are eligible.

There are separate classes for begonias, gloxinias, carnations and mimulus, but that does not, of course, exclude them from these classes.

Class 20 is for hardy annuals.

It is permissible to sow seed under glass. This should be a popular class. Sweet peas, clarkia, godetia, Lavatera, Sweet Sultan, lupins, cornflower and nigella are a few of the best kinds. Sweet peas have already been dealt with. The others can all be easily grown by sowing outside, though the difficulty of catching the soil just right for sowing, and the slug trouble, occasionally renders it desirable to sow inside. For this purpose a frame will do as well or better than a greenhouse.

Sowing outside is best done in a bed specially prepared in mid-April. At one time it was thought sufficient merely to scratch over the surface of the soil before sowing and to sow the seed thickly.

Beautiful annuals deserve better treatment and the soil should be as well prepared as for other plants.

Thinning early, according to the possible size of the plants, staking and watering will constitute the essential attention necessary.

Orchids take the next two classes and the first will probably attract exhibitors who have noted collections.

The class for six plants will give the amateur who makes a hobby of orchids a chance to gain a coveted prize with his favourites. Such men are exceedingly keen and some good plants will certainly be seen.

Strong healthy plants are necessary to produce show spikes and blooms. Shade from strong sun, ample moisture to the roots and in the air, with judicious ventilation will do the rest.

Classes 23 and 24 are for carnations grown under glass.

These can, of course, be either perpetual-flowering, malmaison or border types. Perpetuals are almost exclusively grown now under glass. Plants which have been blooming since last September are not likely to supply the show flowers.

These will probably come from plants which were struck from cuttings inserted late last spring. Such plants, if pinched to make good



specimens, would begin to flower early this year and would continue well past the show date; strong layers rooted last August or September would also provide blooms at the right time. Such plants would have been kept in small pots till January or February and then potted into 5in. or 6in. pots and grown on under favourable conditions of temperature, ventilation, etc.

Cool conditions and partial shade from strong sun will be necessary from May onwards. Red spider, always liable to give trouble, must be kept at bay, and watering must never be neglected. Frequent weak doses of liquid manure water and soot and a little guano will add strength to spikes and substance to blooms. Amateurs who find any difficulty with the perpetual carnation should grow the border varieties. Layers rooted last August should be potted immediately, one plant in a 5in. pot or three in a 6in. Pot firmly, using a compost of good fibrous loam with a small portion of decayed manure and wood ash, and a sprinkling of soot and bone meal. If grown in a cool greenhouse, and proper attention paid to watering and disbudding, there would be every hope of obtaining good blooms at the right date.

Hardy pinks are allotted the next two classes. These are charming garden subjects and varieties are obtainable in fancy, self or laced forms, in addition to the Allwoodii group.

Pinks revel in sunshine and, like their relatives the carnations, prefer a loamy soil to any other, to which has been added lime and potash, the latter, preferably, in the form of burnt wood ash. Young plants set out this spring or last autumn, or older ones, should supply plenty of flowers at the right time.

Slugs are frequently troublesome and must be prevented from damaging the foliage. Liquid manure watering in May and June will be helpful.

Class 27 is for foliage plants in pots. There are numbers of fairly easily grown plants for this class. Choice, highly coloured kinds requiring stove treatment are not much grown now. The green foliaged kinds must be well shaded from sun and syringed freely, except some ferns.

Many highly coloured foliage plants require sun to bring out their richest colour, but Rex begonias and caladiums are exceptions and must be shaded.

Ferns take the next two classes. Except by a few specialists ferns are not grown nearly as much as they deserve. One of the most delightful exhibits at last year's Chelsea Show was one of ferns. The best time to examine ferns for potting or top-dressing is early spring. After this is done they delight in a shady, moist atmosphere with a fair heat until growth is completed. Clay's fertiliser is an excellent stimulant.

Classes 30 and 31 are for violas or pansies.

These are very popular and deservedly so. Cuttings struck last September in a cold frame will make ideal plants for providing blooms at the end of June. Older plants of violas may also be divided and planted now.

Partial shade from strong sun is desirable. All blooms should be removed till plants are

growing freely, and after that, faded flowers regularly. Copious waterings will be essential if the weather be dry in June. In addition to an occasional weak liquid manure watering, two waterings, the first the last week in May and another ten days later, may be given by dissolving a  $\frac{1}{4}$  oz. sulphate of ammonia and  $\frac{1}{4}$  oz. superphosphate in two gallons of water.

Flowers should be thinned to one or two to each shoot. A rich soil must be prepared for the plants to be grown in pans, using equal parts loam, leaf-soil and manure, with a little bone meal and lime rubble. Strong young plants from last year's cuttings should be used, placing three in an 8in. pan. Grow in a frame, shade from strong sunlight, remove the lights at night, attend strictly to watering and remove faded blooms.

Antirrhinums are so easily grown and popular that there is likely to be strong competition for them in the next two classes.

Only strong central spikes will stand much chance of winning. Good plants must be ready for setting out in April. To obtain these the seed must have been sown not later than the end of January. Good garden soil will be suitable, but it must have a dressing of lime before planting. Plant firmly at a distance of 15ins. from plant to plant. Antirrhinums do exceedingly well grown in pots in a cool greenhouse; 5in. or 6in. pots are suitable.

Class 34 is for six pans of one genus of hardy plant.

This class gives the alpine lover a chance, and he will, no doubt, be the principal exhibitor. It is a bit late for many good subjects, but good collections may still be made.

Classes 35 and 36 are for gloxinias and begonias.

In many respects these require similar treatment. Bulbs must be started in March in gentle heat, either in boxes of leaf-soil and sand or singly in pots, a little larger than the bulb. When well started they should be potted on, the gloxinias into 5in. or 6in. pots, the begonias, especially single-flowered forms, will probably take 7in.; plants with double flower forms are not as a rule quite so robust. Compost must be good and should comprise two parts good fibrous loam, one part each decayed manure and leaf-soil. Gloxinias would prefer peat to leaf-soil. Shade from sun, plenty of moisture around the plants and in the air and a steady temperature of 55° at night, rising by day. As the plants begin to flower, drier and more airy conditions will be necessary. A close frame in June would do for the begonias. Flower buds should be picked off begonias till the middle of May. Frequent weak manure waterings should be given when well rooted. Avoid splashing the foliage of gloxinias with manure or soot water.

Large-flowered mimulus take the next class. These flowers have come to the front rapidly this last few years. They are ideal plants for large or small gardens and easily grown. Cuttings rooted last autumn and kept on the dry side during the winter should now be growing freely and ready for potting. Older plants could be divided now or pieces of new growth taken off will root readily in a warm moist and shady

position; 4in. or 5in. pots will be large enough for them. Mimulus like a fairly rich soil and plenty of weak manure water as the rapidly increasing rootstock develops. A shady frame, kept somewhat close till flowering time will suit them.

Class 38 is for six fuchsias to be grown in pots not exceeding 6ins. in diameter. This beautiful old plant is not perhaps so popular as of old, but strongly appeals to many. It is a plant often grown well by the amateur with limited accommodation in the way of glass, and good plants are frequently grown in windows. As the size of pot is restricted, useful specimens rather than wonderful ones, such as were once grown, are expected. Cuttings rooted last autumn and kept quietly growing during the winter, will make ideal plants. Such plants will want their final pot in April. The best plants are those which form a good pyramidal habit without pinching, though it may be necessary to pinch side shoots once. Suitable soil would be, loam two parts, one each of leaf-soil and decayed manure, with sand and fairly firm potting. Shade from strong sun is essential and plenty of moisture at root, and before blooming commences a daily syringing of the plants. The plants may require a neat central stake and the side growths looped to it.

Class 39 is for six native British plants, to be grown in pans or pots.

Ferns would make a most interesting exhibit and vie with the exotic kinds and varieties. There are many good plants in the ericaceæ and leguminosæ orders, and hosts of others.

Whatever is grown it is generally advisable to follow conditions as to soil, sun, shade or moisture under which the plants thrive naturally.

Succulents take the next class.

Large collections of these interesting plants are found in many botanic gardens and also a few in privately owned gardens. Many amateurs grow a few succulents. It is astonishing how often one finds them in the garden where one or two greenhouses comprise the glass-house accommodation. I recently saw a fine specimen of the partridge-breasted aloe in a cottage window. This class will test their popularity. Exhibitors should put up as many species as possible in the space allotted.

Class 41. A group of flowering and foliage plants. This will not only be a test of skill in culture, but largely one of skill and taste in arrangement. Exhibitors should make certain whether the group is to be arranged against a wall or in the body of the hall, and if in the body of the hall, whether the group will be viewed from all sides. In the latter case more edging plants will be required, and a different style of arrangement to that of the group against a wall. It is not necessary to have all choice greenhouse plants. Annuals in pots should be included.

Class 42, and the last, is for the best new plant introduced into this country since 1914.

This is a particularly good idea and should bring forth a collection of plants such as will give the judges food for thought, and exhibitors and those interested in new plants a theme for discussion after the judging. ARTHUR J. COBB.

## SERVICE FOR READERS

Though so many subjects are dealt with in each issue of THE GARDEN, it must constantly happen that readers seek information which is not immediately available. In such circumstances they should make use of our new Service Department. Through its medium each reader's own particular enquiry can be dealt with. No matter what the question is, whether advice is sought as to—

RESTOCKING A GARDEN, COLOUR SCHEMES FOR GARDENS, THE BEST PLANTS FOR CERTAIN SITUATIONS, WHERE TO OBTAIN NEW AND RARE PLANTS, INSECT PESTS, NAMING OF PLANTS, AND THE HUNDRED AND ONE OTHER DETAILS RELATING TO THE GARDEN—

there is always information available from a staff of expert contributors and consultants; and there is no charge for this. It is one of the additional means of Service which THE GARDEN is glad to render to its readers.

All communications should be addressed to the Service Department, THE GARDEN, 20, Tavistock Street, Covent Garden, London, W.C.2.



# NOTES FROM CONTRIBUTORS

## THE HARDINESS OF GLADIOLUS PRIMULINUS.

THE popularity of the gladiolus as a garden flower is increasing very rapidly, and the recent wireless talk upon it by Mr. W. J. Unwin is calculated still further to increase its adherents. It was a little disappointing, however, that the lecturer laid no stress upon the hardiness of *Gladiolus primulinus* and of the many florists' varieties with primulinus "blood." There is, I think, no doubt that the "prim" and "medio" varieties are more reliably hardy than the old *Tritonia* (*Montbretia*) *crocsmæflora*, and they are certainly infinitely hardier than the newer large-flowered "*Montbretias*." Many a clump of *Tritonia crocsmæflora* has perished because a jobbing gardener or handy-man has, in his enthusiasm for tidiness, removed the foliage in late autumn; but a clump of *Gladiolus Orange Brilliant* with the tops shortened (for experiment) to 3 ins., and in a position subject to flooding, has, with me, survived the past winter without the least damage to corms or spawn, though both must have been frozen in wet ground on several occasions. The same clump withstood the winter of 1923-24 under exactly similar conditions, except that the withered foliage was not removed. Perhaps a dozen named varieties and a quantity of unnamed seedlings have been wintered outdoors in my stiff brick-earth soil during the past two years, and not a corm has failed to come through satisfactorily. Strangely enough, the then newly introduced *Gladiolus primulinus* is described in the Supplement to Nicholson's "Dictionary of Gardening" as a *stove* species!

Mr. Unwin, in his wireless talk, laid stress upon a light, rich soil as most suitable for gladiolus culture, but I think one can overdo the richness, and am sure that a fairly stiff soil suits them better. Twenty years ago, on a light, rather hungry soil which suited conifers and all kinds of shrubs "down to the ground," I could not grow gladioli so that they would increase satisfactorily, although, for experiment, I tried them in the rich earth of an onion bed. In some ground near by and on a lower level, of which the basis was a very stiff marl or marly clay, gladioli luxuriated. The primulinus hybrids are much hardier and increase far more rapidly than do the old "stiff-necked," large-flowered *Childsii*, *nancianus* and *gandavensis* strains, and may be expected to flourish in any decent soil which will retain moisture in summer; but that their preference is for a fairly stiff loam there can be no question. Good rose soil is good gladiolus soil also.

In comparing the increase of the primulinus and large-flowered sections, I am, of course, thinking of average varieties. A variety such as *America* would be difficult to surpass as regards ease of propagation, but *America* spawn will not flower the first season, as even pea-sized spawn of some of the "prims" often will, and these latter will reproduce themselves freely from self-sown seeds, if the gardener will allow a seed-pod or two to form.—R. V. G. W.

## TWO HANDSOME GREENHOUSE PLANTS.

UNDOUBTEDLY one of the best plants for a warm greenhouse is *Tillandsia Lindeni*, introduced from the Andes of Peru in 1867. *Tillandsia* is a large genus of the Bromeliaceæ, but few species find favour with growers outside botanic gardens. The subject of this note is well shown in the illustration, the plant having five spikes of bloom. The first flowers open about Christmas time, and there are usually two blooms fully expanded at one time on each spike;

as these fade others appear, and thus the flowering period is extended over three or four months. The colour is a beautiful shade of blue or bluish-purple, and they are exceptionally bright and cheerful during the winter



TILLANDSIA LINDENI, FROM PERU.

months. There is no difficulty in growing this plant and frequent re-potting is not needed. The rooting medium consists of peat and leaf-mould in equal parts, and ordinary flower pots or fairly deep pans are suitable receptacles which must be well provided with drainage. Fresh soil is given after the flower spikes are removed, and old plants produce a number of side shoots which can be removed and potted off singly.

In these days *pancratiums* and *hymenocallis* are not often met with, although they are well worthy of a place in the warm greenhouse or where a temperature of 50° to 55° is kept up. *H. macrostephana* produces sweet-scented white flowers, six to ten being formed in an umbel on a stalk 10 ins. in length. The leaves are from 1 ft. to 2 ft. long. The illustration gives a good idea of the general characteristics of this useful plant, which



THE SWEET-SCENTED HYMENOCALLIS MACROSTEPHANA.

usually flowers in November and December. Frequent re-potting is not desirable, but when such an operation is deemed necessary, a good fibrous loam should be employed, with a little leaf-mould and sand added. Provide

the pots with liberal drainage, and allow ample root space, then no more re-potting will be required for two or three years. *H. macrostephana* is a bulbous plant and the base of the bulb is planted just below the surface of the soil, and any necessary root disturbance should take place just prior to growth becoming active. The plants are kept more or less moist throughout the year, the greatest quantities being afforded when new leaves appear, which is immediately after the flowering period.—T. W. B., *Chepstow*.

## POLYANTHA ROSES.

POSSIBLY nothing gives a better display throughout the whole of the summer months or for a longer period than polyantha roses. They are of very easy cultivation—all they ask is that the ground should be well dug, and very deeply, and then each year well fed. For beds hard pruning should be practised. The plants then make better growth and continue to flower for a longer period. Some of the varieties also make very pretty low hedges. For this purpose the stronger-growing varieties, like *Orleans Rose* (*pelargonium* pink), *Edith Cavell* (scarlet crimson), *Orange King* (the new orange sort) and *Mrs. Cutbush* (bright pink), are the most suitable. For beds the new *Orange King* (a bright orange with a tinge of salmon in it) is very beautiful, also *Salmon Queen* (another very beautiful new sort, bright salmon pink). *Chatillon Rose* is another very fine sort; it has trusses similar to the climbing *American Pillar*, and the colour is almost identical. *Edith Cavell* and *Girlye* are two of the best scarlet crimson sorts; for a good *pelargonium* pink, *Orleans*; *Mrs. Cutbush*, one of the originals, but still one of the best, for a good, clear pink; and *Juliana*, pale flesh, or better described as coral pink. These are the taller-growing sorts. For the very short-growing sorts, *Ellen Poulsen* (deep pink, very sweetly scented), *Baby Tausendschön* (a soft pink), *Rudolph Kluis* (a red form of *Ellen Poulsen*) and *Greta Kluis* (very similar to *Baby Tausendschön* but much deeper in colour) are the best. All these sorts make excellent short standards, and if grown on stems about 2½ ft. to 3 ft. high, help to make a most picturesque and ornamental bed. All the polyantha roses are very useful for pot culture, and are quite easily managed. They are constantly shown at the big horticultural shows grown in this way.—C.

## BROCCOLI ALL THE YEAR.

THIS mild winter we have been able to cut broccoli every week and to supply insistent demands for this fine vegetable. Success is entirely dependent on the weather, but a little planning is also necessary in order to have plants maturing in succession. Autumn broccoli, which come in after cauliflowers, are sown in the open in March. One sowing gave quite ample plants, but the transplanting was done at intervals, a few every week until sufficient were ensured. An improved *Walcheren* and *Michaelmas White* were the varieties. The last plant was cut in January. Winter kinds are generally more or less of a lottery, but not this year. Sown in April, we planted out in June and July, and we are still cutting heads yet. We rely mostly on the sprouting kinds, but this year *Early White* has been everything that could be desired—fine close heads, large size and excellent flavour. The spring kinds depend very much on weather, also, but we have fine plants coming on, tried and true varieties which seldom fail if given reasonable weather.

We would point out that broccoli must be planted firmly and given more space than cauliflowers.—CLYDESDALE.



# SIMPLE GARDENING

## STOPPING CHRYSANTHEMUMS.

FROM the early part of April to the middle of May it will be necessary to stop the leading stems of many varieties of chrysanthemums. The plants, in their normal growth form buds at the point of the shoot; in every case, at this season, those buds are overcome by growth shoots immediately below them, so that the latter grow and the buds shrivel. But the bud has done its work—arrested continual growth of one stem and thus caused several more to form. In the case of exhibition varieties and others that are required to bear blooms on given dates, stopping must be done. The stopping takes the place of the bud: it arrests growth of the main stem and causes several side ones to grow. Of course, only one shoot may be retained if this is desired, instead of three or more. Stopping, in the case of many varieties grown to form specimen plants, is absolutely necessary, as only a few are naturally free-branching enough to be grown on without it. Stopping does not mean cutting down, as it is done by merely removing the tip of the leading stem.

## TYING DOWN VINE AND PEACH SHOOTS.

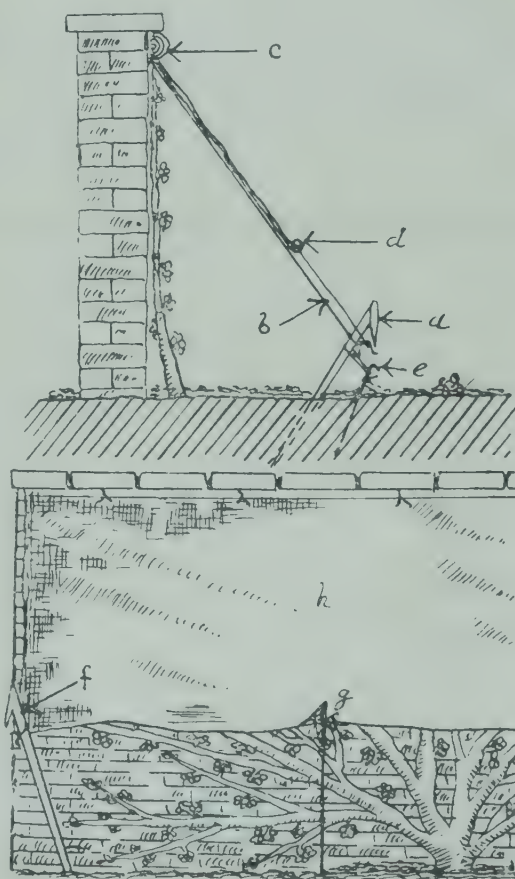
The amateur grape grower generally becomes enthusiastic in his work when young shoots appear and, also, the embryo bunches of grapes. When bunches can be seen in the points of the young shoots, even many experienced cultivators hesitate to remove any but the very weakest. But it is advisable to make up one's mind promptly and rub off, first the weakest and then the badly placed shoots at this early stage of their growth.

Healthy vine and peach shoots grow rapidly at this season and require very careful and constant attention. A cultivator who has not grown these fruits before may be very uncertain as to the treatment of the new shoots now. First, I will refer to vines. A young branch bears a bunch of grapes, sometimes two; the bunch nearest the main rod should be retained, the other, where there are two, pinched off. Then the branch itself should be stopped at the second or third joint beyond the bunch retained, so that by midsummer all roof space will be just covered, not more. The new shoots grow upwards towards the roof-glass, and it is necessary, except in lofty houses where special wire arrangements are made, to tie them down to the wires under the roof and 18 ins. to 2 ft. from it. This tying work must not be done at one time or in one day. With soft strands of raffia, tied about 6 ins. from the end of the shoot, the latter should be depressed a few inches only to prevent the tip touching the glass. At intervals of a few days the shoots can be brought down to the wires safely. When the vines are in flower the final tying may be done. In the case of peaches and nectarines the most basal shoot on the present fruit-bearing branch should be neatly tied in; others, on long branches, will require

stopping where there is danger of overcrowding. This young basal shoot is an important one, as it will be the fruit-bearing branch next year and so take the place, probably, of the one on which it grows this year. Approximately, all new shoots should be tied at a minimum distance of 4 ins. apart.

## PROTECTING FRUIT BLOSSOM.

In many parts of the country the fruit buds are numerous on apple, pear, plum and cherry trees. The recent cold weather has had the effect of retarding the development of the buds, and so we may hope that the flowers will escape severe frosts. But whether plentiful or scarce, the blossom should be covered during the night-time and the early part of the day following night frosts. It is very important that the flowers be kept dry, as if slightly frozen while in that



condition less harm would be done than would be the case if they were wet when frozen. As far as possible, too, covering materials should be kept dry. This can be done by allowing them to dry before they are folded each morning. Wall trees are easily protected by using scrim or tiffany as shown in the sketches. It is not necessary to cover the trees from top to bottom; one-half or a little more being sufficient, as frost strikes downwards. About 3 ft. from the wall drive in pegs 6 ft. apart, shown at a, b is string holding securely the scrim, unrolled from c, at d. Under each long peg drive in a small one, e, to ensure additional firmness. The corner pegs should be driven in at a slight angle outwards, shown at f, and not upright,

similar to the one g; then the canvas, h, will be held firmly against winds. Rough frames may be erected over small trees in the open quarters to bear up light scrim. A few evergreen branches, judiciously tied to the branches of bush-shaped trees, will afford protection. Herring nets, doubled, may be used in place of tiffany.

## CUCUMBERS.

This note is intended chiefly for those persons who wish to grow their own cucumbers but have not had any practical experience. The plants thrive best when they can have a summer temperature and plenty of moisture; with expert treatment they can be grown in a very high temperature at express speed; but we are now considering the best treatment for them in warm greenhouses, pits and frames. The best compost is one made up of fibrous loam and half-rotted leaf-soil in equal proportions for the seeds and seedlings; the same for the growing plants, with rotted manure added. One seed should be sown in a small pot, the seed being placed flat and covered with 1 in. of soil. Place the small pots close together in a propagating frame or a box on a stage and cover with glass. Careful watering is essential, else the seeds and seedlings will suffer. In a glass-house, heated, the bed should be made up one week prior to planting, to get the soil warm. The latter should form a bed 2 ft. wide and 1 ft. deep; the cucumbers being planted 3 ft. 6 ins. apart, trained to stakes and wires, and the ends pinched off when the main stem is 2 ft. high. In frames, cucumbers succeed best grown in similar soil 1 ft. deep on a hot-bed. The plants are allowed to ramble over the surface of the bed, stopped occasionally and surface-dressed as roots appear on the soil. Watch THE GARDEN for more cultural details in due course.

## SOWING AND PLANTING ASPARAGUS.

Asparagus plants, well treated, are long lived, so it is well worth while doing all preparatory work as thoroughly as possible. In naturally sandy loams and where seaweed can be obtained as a surface dressing mixed with littery manure in the winter, very little trouble need be taken other than that entailed by weeding and feeding in July and August. In heavy soils beds should be raised about 6 ins. and deep cultivation be the rule; but all elaborately made foundations for the beds are quite unnecessary. The surface soil should be thoroughly broken before seeds or plants are put in. Sow the seeds thinly in drills nearly 2 ins. deep and at least 16 ins. apart. Plants should be inserted 1 ft. apart on tiny ridges, so that the roots may be spread out evenly, and covered with 3 ins. of heavy, or 4 ins. of light, soil. After planting or sowing, the surface of the bed should not be trodden down nor beaten with a spade. Overcrowded plants never present much sturdiness, and thus close planting should not be done. GEORGE GARNER.

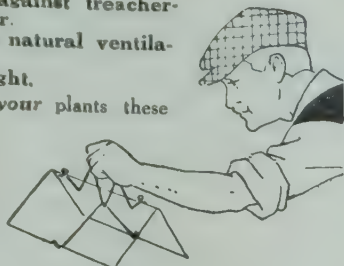


## Three things all young plants MUST have :

1. Protection against treacherous weather.
2. Continuous natural ventilation.
3. Plenty of light.

Are you giving your plants these essentials?

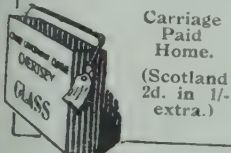
The cold frame doesn't do it—it only gives protection at the expense of light and air.



The only way to make certain of fine crops, whatever the weather,

**For General Use**  
Send for this case of "A" pattern Cloches. Each Cloche 7ins. high. Case contains 12 Cloches, covering 14 feet. **18/-**

**For Larger Plants**  
order "B" Cloches, 9ins. high. Set of 15, enough to cover 22½ feet. **35/-**



Carriage Paid Home.  
(Scotland 2d. in 1/- extra.)

is to cover your young plants with the Chase Continuous Cloche, as so many experienced gardeners are now doing. Made entirely of glass and wire, throwing no shadows to speak of, the Chase Continuous Cloche traps every fleeting ray of sunshine and keeps your young plants always snug and warm. At the same time, it provides ample ventilation continuously, thus ensuring sturdy natural growth without forcing or coddling.

Write for our **FREE BOOKLET No. 7**

and understand all about the Chase Continuous Cloche whilst there is yet time to use it on this year's sowings.

**Chase Continuous Cloche**  
*A Trap to catch the Sunbeams*

Dept. 7, Chertsey, Surrey



## Yes! Hydrangea Mad!! Why Not?

A fascinating and glorious feeling that gives real enjoyment to its possessor.

### THE MODERN HYDRANGEA

gives this delightful sensation and everyone can enjoy it by growing these wonderful new varieties; they are easy to grow, last longer, and are more effective in the greenhouse or garden than any other plant. The colours are a surprise and a delight, ranging from white, mauve, soft pink, rich pink, rose-pink, deep rose, salmon-pink, rosy red, clear red, blue, mauve-blue, blue on old rose, etc. Their cost is moderate compared with their great decorative value. H. J. J. has probably the finest collection in the world, and would welcome a visit or enquiries from all who are interested in Hydrangeas. H. J. J. offers his selection of 2 young plants in 12 distinct named varieties for 12/6. 2 ditto large, ex 5in. pots, 25/-; 12 ditto large that will give 4 to 8 large trusses, for 50/-. Large specimens for tubs, 15/- and 21/- each. All delivered free for cash with order.

SEND FOR CATALOGUE.

H. J. JONES, Rycroft Nurseries, LEWISHAM S.E.13



**ABUNDA**

The wonder-working plant food for all garden crops. A few ounces spread over a square yard will make a vast difference to your Potato crops. Dig it in and watch them grow. Monster Cartons, 1/-; Bags: 7 lbs., 2/-; 14 lbs., 3/6; 28 lbs., 6/6.

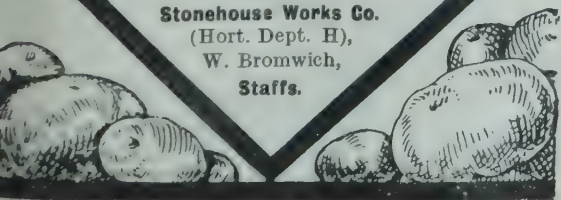
**ABUNDA**

### SLUG SLAYER

Will protect your crops against slugs and snails, which are instantly killed. Large tin, 1/3; 7 lbs., 3/-; 14 lbs., 5/-.

Stonehouse Works Co.  
(Hort. Dept. H),  
W. Bromwich,  
Staffs.

You are missing **THE BEST** if you are not using **ABUNDA**.



## MAINTAINING SOIL FERTILITY

To maintain the fertility of any garden or allotment, it is necessary to keep the soil supplied with the essential elements—nitrogen, phosphates and potash—blended in their proper proportions.

Abol Fertilizers can be relied upon to give the best results, with economy. For full particulars with analysis, please

WRITE FOR  
DESCRIPTIVE FOLDERS.

## AN INTERESTING TREATISE ON GARDEN PESTS GRATIS AND POST FREE

Abol Garden Specialities are sold by all Nurserymen, Seedsmen, Florists, Ironmongers, Chemists and Stores. If any difficulty, write to the Sole Proprietors and Manufacturers.

ABOL, LIMITED,  
9, BELTRING, PADDOCK WOOD,  
KENT.

### Abol Horticultural Fertilizer

A complete all-round Fertilizer. Packages 1cd., 1/6 and 2/-; 7lb. 3/-; 14lb., 5/-; 28lb., 8/-; 56lb., 14/-; 112lb., 25/-. Postage extra.

### Abol Hop Manure

Substitute for Stable Manure. Bag (about 1 bushel), 3/-; Bag (about 4 bushels), 7/-; 3 Bags (about 12 bushels), 20/-; 6 Bags (about 24 bushels), 38/-; 10 Bags (about 40 bushels), 62/6.

### Abol Sweet Pea Manure

7lb., 2/6; 14lb., 4/6; 28lb., 8/-; 56lb., 15/-; 112lb., 28/-. Postage extra. Trial Carton, 1/3, post free.

### Abol Potato Manure

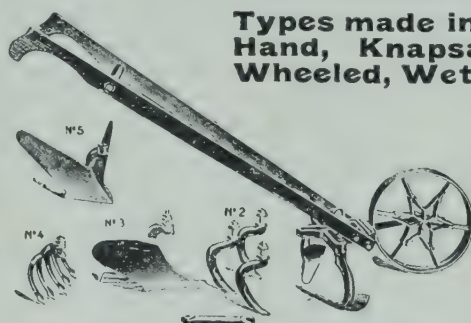
7lb., 2/6; 14lb., 4/-; 28lb., 7/6; 56lb., 13/6; 112lb., 24/-. Postage extra. Larger quantities quoted for.

### Abol Soil-pest Destroyer

Packages, 1/- and 1/9; 7lb., 2/10; 14lb., 4/6; 28lb., 6/6; 56lb., 11/-; 1cwt., 17/6. Postage extra.

Also Tomato Manure, Chrysanthemum Manure, Rose Manure, Abol Non-poisonous Insecticide, Abol Patent Syringes, Spraying Machines, White Fly Compound, Abol Nicotine Fumigating Shreds, etc.

# Abol FERTILIZERS



Types made include Pneumatic, Hand, Knapsack, Bucket and Wheeled, Wet and Dry Sprayers

Prices from— **10/-**

Write for Full Particulars and Catalogues.

## VERMOREL 'ECLAIR' SPRAYING MACHINES

Gained the Highest Awards given in their respective classes at the Royal Horticultural Society's Trials, 1924.



Horse and Hand Hoe Cultivators

**70/- & 35/-**

**COOPER, PEGLER & CO., LTD.**

24a/26c, Christopher St., Finsbury Sq., LONDON, E.C.2



IS YOUR LAWN SATISFACTORY?  
**DAISIES, DANDELIONS, &c.,**  
are all very disfiguring, besides being detrimental to true Tennis or Croquet.

THE PROVED **Velvas** LAWN SAND.

WILL REMOVE THEM AND WILL STIMULATE THE GRASS.

### SEASON'S PRICES.

In Kegs	In Bags	In Tins
112-lb. .. 29/6	112-lb. .. 26/6	14-lb. .. 5/-
56-lb. .. 16/-	56-lb. .. 14/3	7-lb. .. 3/-
28-lb. .. 9/6	28-lb. .. 8/3	3-lb. .. 1/9

If your Seedsman does not carry a stock, send your order direct to the Manufacturers:  
**ROBINSON BROTHERS LIMITED,**  
WEST BROMWICH.



Please mention THE GARDEN when writing



Seedsman



By Appointment.

The only efficient way to kill Worms in Lawns, Croquet Lawns, Tennis Lawns, Bowling Greens, etc., is to dress the turf with

## Carters Worm Killer

The result—turf clean, firm and healthy; an occasional light rolling alone necessary to keep it in perfect condition.

Prices of CARTERS WORM KILLER. Packed in paper lined bags and sent CARRIAGE PAID with full directions.  
7 lb., 3/6; 14 lb., 5/-; 28 lb., 8/-; ½-cwt., 14/-; 1 cwt., 22/6; 5 cwt. at 20/-; 10 cwt. at 18/6; 20 cwt. at 15/9

### CARTERS LEATHER JACKET KILLER, "KIL-JAC"

This preparation is absolutely non-poisonous and does not harm the turf in any way at all.

Per cwt. ½-cwt. ¼-cwt. 14 lb. 7 lb.  
60/- 31/6 16/- 8/6 5/-  
Carriage paid.

### CARTERS COMPLETE GRASS FERTILISER No. 1

A complete grass food for nursing along turf damaged by leather jackets, etc.  
7 lb., 3/-; 14 lb., 4/6; 28 lb., 8/-; 56 lb., 14/6;  
1 cwt., 25/-; 5 cwt. at 23/9. Carriage paid.

**Carters**  
TESTED SEEDS

Grass Seed and Turf Specialists,

RAYNES PARK, LONDON, S.W.20

## KILOGRUB



Exterminates all Garden Pests in the soil.  
Your Seedsman has it.  
Tins:—9d., 1/6, and 2/6.

Bags:—½-cwt. 6/6; ¼-cwt. 9/6; 1-cwt. 15/-.  
Write for particulars to the manufacturers—  
JOHN PEAK & Co., Ltd., Wigan, Lancs.

Please mention THE GARDEN when writing.

### SOIL PESTS DESTROYED

by "ALPHOL"

Sample 14 lb., 3/6 carr. paid

Write for particulars of this and other reliable Garden Helps, Lawn Improvers, "Veribest" Seeds, etc., to

Garden Supplies, Ltd., Cranmer St., Liverpool

### A GOOD WEED KILLER.

ONE of the best Weed Killers is the "EUREKA," manufactured by Messrs. Tomlinson & Hayward, Limited, Lincoln. It can be had in powder and liquid form and is excellent for keeping the gravel paths clean and bright with a minimum of labour and without injuring borders or disturbing gravel. This is the time when paths require special attention. The firm have other Eureka specialties—Lawn Sand, Worm Killer, Insecticides, White Fly Fumigant, Bordeaux Mixture, etc. Full particulars and lists will be sent on application.

**CHEAP GOVERNMENT WIRE !!!**—Great for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760 yards). Postcard to-day for free samples and list of 300 bargains.—GREEN'S GOVERNMENT STORES, 121, Albert Street, Lytham.

**He won't eat beyond the protection line of**

Of all chemists and stores

**SANITAS POWDERS**

Caterpillars, slugs, snails and worms, birds, rats, and mice—they all hate Sanitas Powder and avoid its neighbourhood.

Sprinkle Sanitas Powder on flowers and plants; dust it on the soil. There is no poison in it. Try a 1/3 tin, or write for bulk quotation.

THE "SANITAS" CO. LTD. LIMEHOUSE, LONDON, E.

## SPECIAL OFFER OF GLADIOLI

For April Planting.

Choice Blue (Baron V. Hulot)  
" Pink (America)  
" Red (Brenchleyensis)  
" Scarlet (Red Emperor)  
" White (White Queen)  
" Yellow (Schwaben)

Special Price - 1/9 per doz.

### Excelsior Mixture

Composed of seedlings and named varieties, very choice. Per doz., 1/6.

### Gladiolus Primulinus

A charming new class, very graceful, fine for cutting. Per doz., 1/3.

Orders of 5/- and over carriage paid

Under 5/- 6d. should be added for postage

Seed and Bulb and Gladioli Catalogues free

## ALFRED DAWKINS

17 years Manager, Seed and Bulb Dept.,  
JAMES VEITCH & SONS

408, King's Road, Chelsea

S.W.10

Please mention THE GARDEN when writing.

## CRAZY PAVING

Lumps for Rockeries, etc.  
4 Ton Lots and upwards.

HENRY L. COOPER & Co., 29, Mark Lane, LONDON, E.C.3

Please mention THE GARDEN when writing.

**"Auto-Shreds" did it!**

I just burnt them on the ground and they thoroughly fumigated my plants. The judge wanted the name of the stuff that kept my flowers so insect-free. I told him "Darlington's AUTO-SHREDS." At all seedsmen they cost

No. 1. (To fumigate 10,000 cubic feet.) For tender or ordinary plants, 6/-  
No. 2. (10,000 c.f.) Ordinary plants 4/6  
No. 3. (1,000 c.f.) Ordinary or tender plants 1/-  
No. 4. (2,500 c.f.) do. 1/9

W. DARLINGTON & SONS, LTD., HACKNEY, LONDON, E.8.

## TANNED GARDEN NETS

Small Mesh for Seeds and Fruit Protection  
60 yds. long, 1 yd. wide 5/- 60 yds. long, 4 yds. wide 20/-  
60 " 2 " 10/- 60 " 5 " 25/-  
60 " 3 " 15/- 60 " 6 " 30/-  
Half Lengths supplied.

### STOUT & LACK NETS

for Tennis Court Bordering, with Lines Top and Bottom.  
30 yards long, 2 yards wide .. 20/-  
30 " 3 " .. 30/-  
30 " 4 " .. 40/-  
Standards for same, 10 ft. high, 3/6 each. All carr. paid.

**H. ROBINSON,**  
Garden and Tennis Net Works, RYE.

Please mention THE GARDEN when writing.



# WAR AGAINST WORMS

IT is astonishing to find in these enlightened days of horticultural progress that there are still many people who cling to the idea that the presence of earth-worms in the lawn must be looked upon as a boon rather than a pest. Nor is this belief confined solely to those more old-fashioned and conservative gardeners. Only a short time ago the writer heard a well known and usually progressive man, who is intimately connected with one of our largest seed houses, remark that he was inclined to agree with the old-fashioned idea that worms were beneficial, if only for their value in aerating the soil.

Instances of this kind are more surprising when one considers that leading experts (many of whom have devoted a lifetime of study to the development and improvement of lawns) are constantly expounding the opinion, and backing it by logical argument and practical illustration, that worms are the worst possible form of pest to attack turf. Mr. Reginald Beale, undoubtedly one with an extensive knowledge of turf and its treatment, devotes a whole chapter to this subject in his invaluable work, "Lawns for Sports" (Simpkin Marshall, London, 12s. 6d.). Any person, be he interested in only a small patch of lawn or the biggest possible type of playing field, will find this book a valuable addition to his library.

Examine any lawn which has not been cleared of these pests and you will usually find it liberally scattered with their filthy casts, which not only foul the surface, but when trodden or rolled down, literally smother and exterminate the finer grasses. The grit from these casts injures the cutting knives and fine adjustment of lawn mowers to an extent almost beyond belief. Add to this the fact that by their constant tunnelling and burrowing the subsoil becomes so honeycombed that otherwise strong turf becomes tender and spongy and gives to the slightest pressure, and one will speedily realise how strong is the case against the worm. It is this latter fact which is responsible for the majority of those numerous depressions and pot-holes which are not only an eyesore but which destroy the accuracy of many lawns. As the result of many years' scientific research, there are on the market to-day several reliable remedies manufactured with the sole idea of exterminating worms in an easy, but nevertheless thorough manner. These remedies usually take the form of a powder, which is scattered broadcast on the ground and immediately washed in by copious watering. The worms, when the liquid comes into contact with them, crowd to the surface and quickly die. The best time to kill them is during the bi-annual breeding seasons, when they are working quite close to the surface. These seasons are, roughly, from the end of March to the end of May, and from the end of August to the beginning of December. Leave the turf unrolled for a few days in order that the

worms may open up their runs and so give ready access to the fluid. Select a mild, dull day with the wind in the south or west, when the ground is moist and the worms are actively working. A good plan to make sure of the latter point and save time, expense and labour, is to try a small quantity of the remedy over a space of one or two square yards and watch results. The first worms should be up in a few minutes, while in a quarter of an hour they should be coming up in scores. If satisfactory results are not obtained in this test, the work should be held over until a more favourable day. The powder should then be broadcast over the lawn in the specified quantity and immediately washed in by means of a hose, water-cart, can or sprinkler apparatus, using as much water as possible. If no water is available, the operations must be carried out during a settled spell of very wet weather, while it is actually raining hard. The effect is instantaneous, and the worms, large and small, struggle to the surface and die. After the dead worms have been brushed up and cleared away, the turf should be well rolled. This will gradually but permanently restore solidity to the turf, and it will soon assume its original true and firm playing surface.

For the guidance of readers a few particulars of well known remedies are given herewith.

*Carter's Wormkiller* was introduced by the famous Raynes Park firm in 1902. This preparation is sent out in powder form in bags of 7lb. and upwards. It is guaranteed to be infallible. While it is not harmful to animal and bird life, it will kill fish, and should therefore not

be used on lawns which drain off into fishponds.

*Vermol* can be obtained from the Vermol Products Company, who guarantee that it will immediately kill all worms with which it comes into contact. The manufacturers claim that a practical trial will demonstrate its excellence as a worm eradicator, and also its extraordinary effect as a fertilising agent. It is non-poisonous to animal and bird life.

*XL All Powder and XL All Liquid Wormkillers.*—As their name implies, these preparations come from the well known house of G. H. Richards, Limited, whose XL All horticultural specialities are now famous throughout the world. Both are highly effective, and the powder form is non-injurious to animal or bird life and can be obtained in quite small quantities or in bulk as required. The liquid form will require more careful handling, as it is a poisonous compound. A half-pint bottle is sufficient to make 15 gallons, which is applied direct to the ground by means of a fine rose water can. Both these compounds can be obtained from any horticultural trader.

*Cooper's Powder Wormkiller.*—Manufactured and supplied by Messrs. William Cooper and Nephews, who claim that their preparation is perfectly harmless to everything but worms, and that it will not damage or discolour the turf in any way, but will have a decided effect as a fertiliser, and in addition will make the ground uninhabitable for worms. It is sold in convenient quantities and is guaranteed to be reliable.

With the aid of any of these proprietary brands a large measure of success will be obtained in ridding the lawn of these rather destructive pests.

J. C.

He can only tackle them one at a time  
but—



# VERMOL

## KILLS WORMS AND GROWS GOOD GRASS

**What users say of Vermol:—**

**The Edgbaston Golf Club Ltd.—**

"The Midland Professional Championship was held on our course a few weeks ago, and all the players were delighted at the excellent state of our Greens. There is no doubt that VERMOL WORM KILLER has had much to do in making them in this condition."

## VERMOL PRODUCTS CO.,

### 61, St. Mary Axe, London, E.C. 3

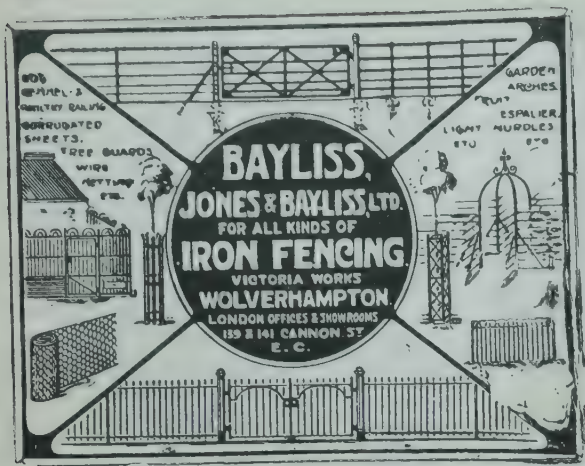
Telephones: Aven 1869 & 1870.

Telegrams: "Pinerous, Phone, London."

VERMOL  
gets the lot







**BAYLISS JONES & BAYLISS LTD.**  
FOR ALL KINDS OF  
**IRON FENCING.**  
VICTORIA WORKS  
WOLVERHAMPTON  
LONDON OFFICES & SHOWROOMS  
189 & 141 CANNON ST.  
E.C.



**THOMSON'S MANURES**

Famous for half a century.  
Unrivalled for all Garden Crops.  
Sold by Seedsmen and Nurserymen everywhere.  
Sole Makers—  
**WM. THOMSON & Sons, Ltd., CLOVENFORDS**

## PHOSPHATE OF AMMONIA PHOSPHATE OF POTASH

Very concentrated, especially suitable for high-class Gardening Fertilisers

**PERRY & HOPE, LTD., Nitshill, nr. GLASGOW**



## MCDUGALL'S PERFECT SAFETY WEEDKILLER

Keeps paths and drives free from unsightly growth.

Being entirely free from poison its use does not involve the slightest danger to children or domestic animals, or any fear of poisoning poultry, game, etc.

Pint tins ... 1/6 2 gall. drums 6/6  
Quart " ... 2/6 5 " 25/-  
1/2 gall. " ... 4/- 40 " casks £7/10/-

1 pint Weedkiller to 3 gallons water.

Sold by  
Nurserymen, Seedsmen,  
Ironmongers, etc.

If you have any difficulty in obtaining apply direct to:—

**McDougall & Robertson, Ltd.**  
BERKHAMSTED, Herts.

(formerly of Manchester.)



## WEEDS

One application of

### HARRISON'S Reliable WEED KILLER

will keep your Garden Paths, Carriage Drives, etc., free from weeds for at least 12 months. The best Killer for Daisy, Plantain and Dandelion in Lawns. Brightens the Gravel. Immense Saving in Labour.

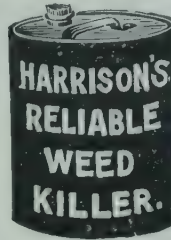
5 Gallons .. 23/6 Drum .. 12/- extra, Carr. Paid  
10 " .. 42/6 " .. 15/- " " "  
40 " .. 150/- Cask .. 80/- " " "

Irish orders are not subject to these carriage terms but are paid to any English port. Full price allowed for all drums and casks if returned in good condition carriage paid within 2 months.

N.B.—In the prices of the above please note that this Weed Killer mixes 1 to 50 of water, being double the ordinary strength. One gallon mixed with 50 gallons of water will cover an area of from 150 to 200 square yards effectively.

**G. HARRISON,**

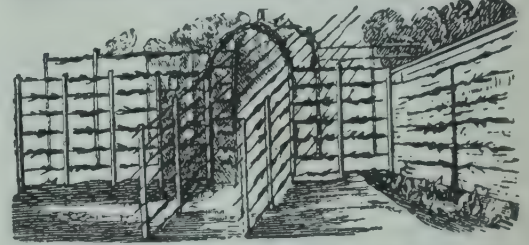
Horticultural Chemist,  
**READING.**



## HILL & SMITH, Ltd., BRIERLEY HILL, STAFFS,

Makers of

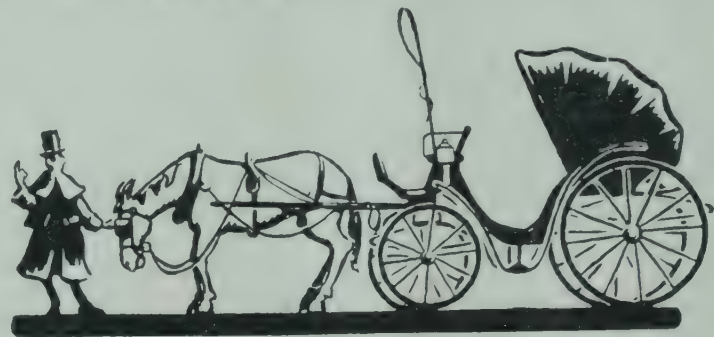
**IRON FENCING, HURDLES, GATES, WIRE  
NETTING AND GARDEN IRONWORK**



Other Products—Hay and Grain Sheds, Dutch Barns, Galvanized Corrugated Sheets and Structural Steelwork.

Catalogues free on mentioning this paper.

London: 8, VICTORIA ST., WESTMINSTER, S.W.1



## IN 1925

you would not hire a "fly" to get anywhere quickly or cheaply, even if you were sure of arriving safely. Then why laboriously and expensively mow your grass with push and horse-drawn mowers.

Get a 'Governor' Patent Water-Cooled Motor Mower and do your cutting in a third of the time, and do it better at 50 per cent. less cost.

The 'Governor' is simple in operation (a boy can work it), clean and reliable, and it represents the finest 22in. Motor Mower engineering science has yet evolved. We will send it to you for a seven days' Free Trial.

"It works while you walk."



22in.  
Water-Cooled

**£75**

22in. Air-Cooled

**£65**

Guaranteed  
12 months.

**'GOVERNOR'**  
**MOTOR LAWN MOWER**  
22in. WATER-COOLED

Write for Free Illustrated Booklet Now to Sole Proprietors:—

**JOHN SHAW & SONS WOLVERHAMPTON LTD.** (Dept. 12)  
WOLVERHAMPTON. Established 1795.



# THE GARDEN.

**WATERER'S GOLD MEDAL RHODODENDRONS** and Azaleas. Rare Hardy Shrubs, Alpine and Perennial Plants, Vegetable and Flower Seeds, Scotch Grown Seed Potatoes, Bedding Plants and Dahlias. Catalogues Free.—**JOHN WATERER, SONS AND CRISP, LIMITED**, Twyford (Berks.), Bagshot (Surrey), and London.

**WAKELEY'S PATENTED HOP MANURE.**—The original and only substitute for Stable Manure. See advert on back cover.

**WM. DUNCAN TUCKER & SONS, LTD.,** Lawrence Road, South Tottenham, N.15.—Conservatories, Winter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**BIRDS' BATHS, GARDEN VASES, SUN-DIALS, NESTING BOXES.** Catalogue (No. 4) free.—**MOORTON**, 60, Buckingham Palace Road, S.W.

**RIVERS' ASPARAGUS.**—Strong roots, one, two and three years old. Fruit trees, Roses, Vines and Orchard House trees of first-class quality. A large stock always on view. Inspection invited. Price list post free.—**THOS. RIVERS AND SON, LIMITED**, The Nurseries, Sawbridgeworth, Herts.

**GARDEN SPADES, SPECIAL, 2/6, HAND GRUBBERS, 1/6.** Carriage Paid.—**MCINTOSH**, Forgue, Aberdeenshire.

**TANNED GARDEN NETTING**, small mesh, 25yds. by 1yd., 2s.; 25yds. by 2yds., 4s.; 40yds. by 1yd., 3s. 3d.; 40yds. by 2yds., 6s. 6d.; 40yds. by 3yds., 9s. 9d.; carriage paid. Compare our netting with others. Lists now ready.—**GALLOP**, Net Manufacturer, Hastings. Telephone: 352.

**TO LOVERS OF ROCK GARDENS.**—Inexpensive plants for Sale. Apply **NELL SHAW**, Hatfield Place, Bath.

**WELLS' CATALOGUE OF CHRYSANTHEMUMS** now ready, and will be sent post free on application.—**W. WELLS & Co.**, Merstham, Surrey.

**WM. ARTINDALE & SON**, Nether Green Nursery, Sheffield, will be pleased to send their Catalogues of Hardy Plants, Seeds and Gladioli on request.

**TENNIS BOUNDARY NETTING**, 50 yds. x 4 yds., 20/- Iron Standards, 9 ft., 3/- each. Tennis Nets from 8/- Sports Lists now ready.—**GALLOP**, Net Manufacturer Hastings.

**ORCHIS FOLIOSA**, splendid flowering roots of this charming hardy border plant, 2/6 each; 10 for 20/- — **MORRIS**, Formakin, Bishopton, Renfrewshire.

**HERBERT CHAPMAN'S Bargain List of Job** Lots of choice Daffodils, offered in order to clear ground, is now ready, and will be posted to anyone sending a p.c. to **HERBERT CHAPMAN, LTD.**, Rotherside Gardens, Rye, Sussex.

**ALPINES, ROCK PLANTS ONLY.**—Descriptive Catalogue 600 varieties, free.—**TERRY LEE, F.R.H.S.**, 12, Morden Road, Stechford, Birmingham.

**FOR 10/-** I send free to you 14 rooted and sound cuttings of Carnations in 7 of the best named new Riviera varieties and 7 different colours.—**P. GEYER**, Horticulteur, St. Jean, Antibes, A.M., France.

**FULL OF WISE SAWS AND MODERN** instances our catalogue offers all that is brightest and best for the present day garden. The choice plants at Sixpence a time may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—**FEILDEN AND CROUCH**, 2, Fairseat Nurseries, Wrotham, Kent.

**ROCK PLANTS. RARE SPECIES, AND** Garden Hybrids. List Free. Rock Garden always open for inspection.—**MISS TAYLOR**, Quarry Orchard, Cleurs, Reigate.

**WANTED TO PLACE OUT, SEVERAL** LADS, who have had good training as Gardeners. Apply, stating terms, to the **SUPERINTENDENT MATRON**, Cottage Homes School, Banstead, Surrey.

**BARR'S FLOWER & VEGETABLE SEEDS**, of finest selected strains and tested growth, also the best Scotch grown, hand-picked Seed Potatoes, strong Asparagus Plants, etc.

**BARR'S HARDY PERENNIALS, ALPINES, ROCK PLANTS, AQUATICS, CLIMBERS, TALL and DWARF FLAG IRISES**, etc., for Spring planting.

**BARR'S LILIES, GLADIOLI, DAHLIAS, CANNAS, MONTBRIETIAS, ANEMONES, BEGONIAS, TUBEROSES, TIGRIDIAS**, &c., for Spring planting. Catalogues free.—**BARR & SONS**, King Street, Covent Garden, W.C.2.

**THE DOUGLAS CLOVES AND BORDER CARNATIONS**; glorious scent, stiff stems, and continuous flowering. The new crop of seed is now ready to sow. 2s. 6d. and 5s. per packet. Plant catalogue now ready.—**J. DOUGLAS** (The Premier House for Carnations), Gt. Bookham.

**IRON AND WIRE FENCING FOR GARDENS.**—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—**BOULTON AND PAUL, LIMITED**, Norwich.

**ALL PROFESSIONAL GARDENERS** should become Members of the British Gardeners' Association. Full particulars (stamp).—**JOHN WEATHERS**, 1, Park View, Isleworth.

**SEWAGE DISPOSAL FOR COUNTRY HOUSES.**—No emptying of cesspools; a perfect fertiliser; no solids; no open filters: perfectly automatic; everything underground. State particulars.—**WILLIAM BEATTIE**, 8, Lower Grosvenor Place, Westminster.

**JAMES BACKHOUSE, F.L.S., F.R.H.S.**, for many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to **CARR FEGLA**, Arthog, North Wales.

**LAXTON'S NEW SEED CATALOGUE**, containing Novelties for 1925. New Pea "Bedford Champion" and "Laxton's Progress," post free on application. Fruit Tree Catalogue and Cultural Hints can also be sent, post free, on request.—**LAXTON BROTHERS**, Nurserymen, Bedford.

**ROCK PLANTS**, best varieties, inexpensive, list free.—**MARION GLEDSTANES**, Fardross, Clogher, Ireland.

**CHOICE NEW CHRYSANTHEMUMS.**—Our Catalogue of nearly 900 varieties, including Grand Novelties for 1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready. Post free on application.—**J. W. COLE AND SON**, Chrysanthemum Specialists, Peterborough.

**PRIMULA, ALPINE AND PERENNIAL.** Seeds, from large (1,500) collection, sold cheap. List free.—**REV. J. F. ANDERSON**, Glenn Hall, Leicester.

**GARDEN NETS.**—Best tanned, small mesh, 25yds. by 1yd., 2/-; 25yds. by 2yds., 4/-; 25yds. by 3yds., 6/-; 25yds. by 4yds., 8/- Carr. Paid. Satisfaction guaranteed. Tennis nets from 10/-. Special nets for tennis boundary. Pea training nets. Lists and samples free.—**G. JARRETT**, Net-maker, Rye.

**CANADIAN AND AMERICAN GLADIOLI.**—The best of the standard varieties and novelties.—**J. W. CROW**, Simcoe, Ontario, Canada.

**TENNIS COURT FENCING.**—A speciality. Made up as complete enclosures, with standards, wire, and straining posts, from 6 ft. to 12 ft. high. Write to Dept. FP/G for particulars.—**BOULTON AND PAUL, LTD.**, Norwich.

**VANCOUVER ISLAND** and Pacific Coast rare ornamental alpine and lowland plants, bulbs, etc. Only those difficult or impossible to obtain in England are offered. Plants well packed and despatched at the right time of year arrive in good condition. Write for list.—**J. BENNETT**, Lake Hill P.O., Victoria, B.C., Canada.

## SUTTONS SEEDS

for present Sowing.  
Collections of Vegetable Seeds, 5/9, 8/3 and 11/3.  
Collection of Vegetable and Flower Seeds, 10/9.  
Post Free.  
The finest value offered to-day.  
**SUTTON & SONS, THE KING'S SEEDSMEN, READING.**

**DOBBIE'S 1925 CATALOGUE AND GUIDE**, 136 pages, 194 illustrations. Free to all readers. Please mention THE GARDEN when writing.—**DOBBIE & Co., LTD.**, Edinburgh

**BATH'S SELECT SEEDS AND PLANTS.**—New Illustrated Catalogue of choice Vegetable and Flower Seeds and Plants is now ready, and will be sent post free on application.—(Dept. E), **R. H. BATH, LTD.**, Floral Farms, Wisbech.

**CHEAP GOVERNMENT WIRE !!!** Great for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—**GREEN'S GOVERNMENT STORES**, 69, Albert Street, Lytham.

**LOAM.**—Fibrous Yellow Turf Loam. Illustrated Catalogue Free.—**A. B. JOHNSTON**, New Park, Cranleigh, Surrey.

**108 GLADIOLI** for 8s. 9d. post paid.—The most dazzlingly brilliant flowers on earth, with spikes of blooms 18ins. long; 12 each of 9 kinds (108 bulbs), all separately packed and named, for 8s. 9d., post paid; half lot, 4s. 9d., post paid (cultural instructions and beautifully illustrated Flower and Vegetable Catalogues included).—**J. KAY AND Co.**, Goodmayes Road, Goodmayes, Essex.

**BEGONIAS AND GLOXINIAS.**—Kay's prize strain with blooms often measuring 8ins. across: a collection of 12 Single and 12 Double Begonias, also 6 Gloxinias—all separately packed and named, with cultural instructions and illustrated catalogues, for 6s. 3d., post paid; half lot, 3s. 6d., post paid.—**J. KAY AND Co.**, Goodmayes Road, Goodmayes, Essex.

## HEDGING PLANTS.

**PRIVET.**—Strong English-grown, bushy and well rooted: 30-36ins. . . . . at 13/- per 100. 36-40ins. . . . . at 15/- per 100. **QUICKTHORN.**—Extra bushy: 24-30ins. . . . . at 10/- per 100. Carr. Pd. on 1,000 Lots.—**HODSONS**, Castlegate, Nottingham.

**MICHAELMAS DAISIES.**—Pyrethrums and other hardy perennials. For new catalogue write to **MRS. THORNELEY**, Nursteed, Devizes.

**GOVERNMENT TROUSERS AND JACKETS.** New, 6/9; Soiled, 3/9. Post Free.—**MCINTOSH**, Forgue, Aberdeenshire.

**GARDEN NETTING.**—Best selected, small mesh, tanned, 25 by 4 yds., 8/-, or 8 yds., 16/-. Carriage paid. Tennis Nets and Standards. List free.—**STRAWBERRY NETTING Co.**, 5, Suffolk Terrace, Lowestoft.

**LOOK! TANNED GARDEN NETS.**—All orders despatched same day. 25 yards by 1 yard, 2/-; 25 by 2 4/-; 25 by 3, 6/-. Odd netting for bushes, 6 lbs. for 2/6. All carriage paid. Any sizes supplied. Also Tennis Boundary Nets.—**MOORE & Co.**, Net Works, Rye.

**CAULIFLOWER PLANTS.**—Best (Autumn-Sown) Plants.—Early London and Walcheren, 12/6 per 1,000; prompt delivery, carriage paid; cash with order. Special quotation for large quantities, and Price Lists of all varieties of Cabbage Plants (Autumn-Sown) of the best stocks and at the lowest prices, on application.—**JOHN GILLIES, PRESTONPANS, LTD.**, Prestonpans, East Lothian. Largest cabbage plan growers in Britain. Established over 50 years. Telegrams "Plants, Prestonpans." Telephone 24 Prestonpans.

**GREENHOUSE PAINTING AND GLAZING.**—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 22/- per cwt., kegs extra; 7lb. tins., 4/- post free; 14lb. tins., 5/6, each, carriage extra, tins free.—Full particulars from **W. CARSON & SONS**, Grove Works, Battersea, S.W.11.



# GLADIOLUS

FIRST-SIZE BULBS.  
FINEST VARIETIES.

	per doz.	100
America, lilac rose .. ..	1/6	10/0
Baron Hulot, indigo blue ..	1/9	12/6
Glory of Holland, pure white	1/9	12/6
Golden West, orange-scarlet ..	1/9	12/6
Halley, delicate salmon-pink ..	1/6	10/6
Love's Fire, coral scarlet ..	2/6	17/6
Loveliness, creamy white ..	2/3	15/0
Niagara, nankeen-yellow ..	1/9	12/6
Panama, deep pink ..	1/9	12/6
Schwaben, soft yellow ..	1/9	12/6
War, deep blood red ..	1/9	12/6
White Giant, pure white ..	1/9	12/6
COLLECTION 100 in 10 varieties ..		13/6
"  120 " 12 " ..		16/6
"  240 " 12 " ..		30/0
Primulinus Hybrids ..	1/5	10/6

All Bulbs Carriage Paid. Catalogue Free.

## WM. POWER & CO., WATERFORD.

Please mention THE GARDEN when writing.

Try our "Marvel" Collection of dependable seeds for a 300 yards' plot, carriage paid for 5/- Potatoes excluded! Catalogue included!  
**UPSTONES, Seed Experts, ROTHERHAM**

## CRISP'S PERENNIAL BROCCOLI

Lasts many years and gives a crop each year of from 5 to 12 good heads.  
**SOW SEED NOW, 1/- per Packet; or place your order for plants to be sent in May, 1/- per doz., 5/- per 100.**  
**H. C. GROOM & CO., 5, Guilden Sutton, CHESTER**

## The Glen Road Iris Gardens

SPECIALIZE IN RARE AND FINE VARIETIES OF BEARDED IRISES

Send for List

Grace Sturtevant, Prop.  
Wellesley Farms . Massachusetts . U.S.A.

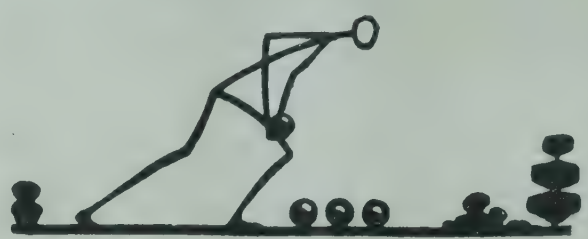
## VIOLETS FOR BEDS, ROCK GARDENS AND NATURALIZING.

MISS STANISTREET can supply now healthy young plants, properly selected and packed by an expert, from her Unique Collection of over 50 Varieties.  
: : Descriptive List Free. : :  
**KILLALOE, CO. CLARE.**

## SOIL PESTS DESTROYED

by "ALPHOL"  
Sample 14 lb., 3/6 carr. paid

Write for particulars of this and other reliable Garden Helps, Lawn Improvers, "Veribest" Seeds, etc., to  
**Garden Supplies, Ltd., Cranmer St., Liverpool**  
Please mention THE GARDEN when writing.



## GRASS for WOODS

' CUT CLOSELY AND EVENLY '

—Bowls Club.

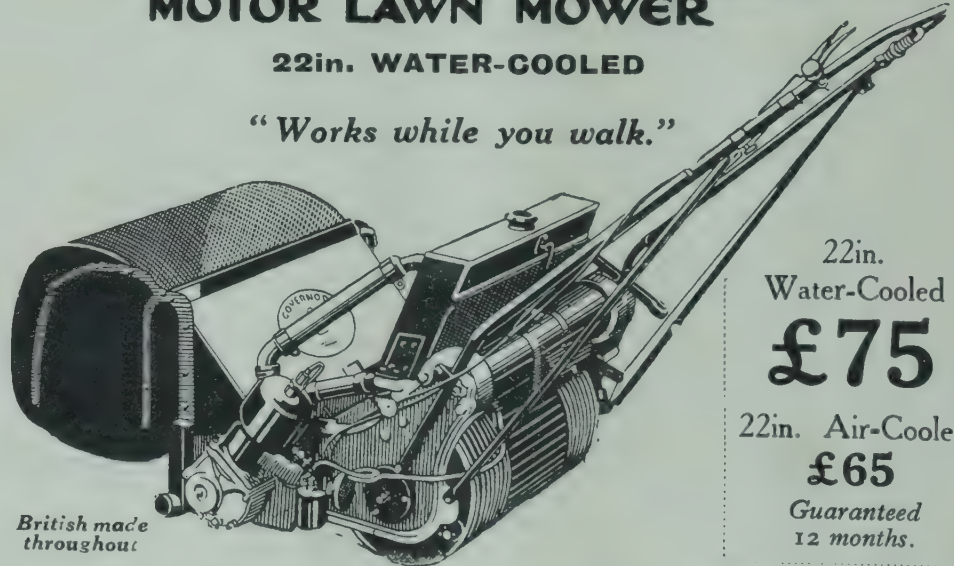
Dear Sirs,  
As Secretary of the above Club, I wish to say that the 'Governor' Motor Lawn Mower has proved most satisfactory. We decided to try it on our bowling green, which is laid with Cumberland turf, and we are very pleased with the result. The machine cut closely and evenly, and gave a fine running surface for the woods, which all our bowlers very much appreciated.  
Yours truly, —Hon. Sec.

The low adjustability of the knives permits that extra fine cutting necessary where the quality of the work is of paramount importance. This will make a strong appeal to all Gardeners.

## 'GOVERNOR' MOTOR LAWN MOWER

22in. WATER-COOLED

"Works while you walk."



British made throughout

22in.  
Water-Cooled  
**£75**

22in. Air-Cooled  
**£65**  
Guaranteed 12 months.

Write for Free Illustrated Booklet NOW! We will send you the 'Governor' for a seven days' Free Trial

**JOHN SHAW & SONS WOLVERHAMPTON LTD.** (Dept. 12)  
WOLVERHAMPTON. Established 1795.

## WEEDS

### HARRISON'S Reliable WEED KILLER

One application of will keep your Garden Paths, Carriage Drives, etc., free from weeds for at least 12 months. The best Killer for Daisies, Plantain and Dandelion in Lawns. Brightens the Gravel. Immense Saving in Labour.  
5 Gallons .. 23/6    Drum .. 12/- extra, Carr. Paid  
10 " .. 42/6    " .. 15/- " " "  
40 " .. 150/-    Cask .. 80/- " " "  
Irish orders are not subject to these carriage terms but are paid to any English port. Full price allowed for all drums and casks if returned in good condition carriage paid within 2 months.

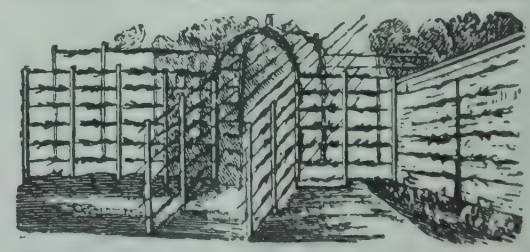
N.B.—In the prices of the above please note that this 'Weed Killer' mixes 1 to 50 of water, being double the ordinary strength. One gallon mixed with 50 gallons of water will cover an area of from 150 to 200 square yards effectively.

**G. HARRISON,**  
Horticultural Chemist,  
**READING.**



## HILL & SMITH, Ltd., BRIERLEY HILL, STAFFS,

Makers of  
**IRON FENCING, HURDLES, GATES, WIRE NETTING AND GARDEN IRONWORK**



Other Products—Hay and Grain Sheds, Dutch Barns, Galvanized Corrugated Sheets and Structural Steelwork.  
Catalogues free on mentioning this paper.  
London: 8, VICTORIA ST., WESTMINSTER, S.W.1





1925

CATALOGUE of  
Perpetual-Flowering

## CARNATIONS

If you are interested and would like a copy, post your name and full address to:

**C. ENGELMANN, Ltd.,**  
SAFFRON WALDEN, Essex

Please mention THE GARDEN when writing.

## WATTS' POLYANTHUS PRIMROSES

1st Class Certificate Nat. Prim. Society			
YELLOW	per pkt.	1/-	2/6
YELLOW and WHITE	"	1/-	2/6
WHITE	"	1/-	2/6
RED, CRIMSON and DARK	"	1/-	2/6
MIXED	"	1/-	2/6
BLUE and VIOLET	"	"	5/-

The Welsh Bulb Fields :: St. Asaph

Please mention THE GARDEN when writing.

**MANURES.** The most complete little book on the subject is "The Manual of Manures," by H. VENDELMANS. 4/5; by post, 4/9. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## NEW GIANT SWORD RUNNER BEAN

The Most Wonderful Runner Bean in the World, one pod enough for one person.

40—1/6, 80—2/3, 120—3/- 200—5/-

GIVEN FREE WITH ALL ORDERS—Packet of our Famous Golden Balloon Prize Winning Onion Seed. Onions grow 2-5 lbs. in weight. Also packet of Spiral Brussel Sprout Seed.

Address—H. GALE, King's Somborne, Hants.

38th SEASON

**Mrs. PYM'S Famous Plants**

**GOOD AND CHEAP**

Send for New Spring Catalogue  
— NOW READY. —

**Plant NOW for Success.**

Magnificent choice hardy Perennials,  
Rockery Plants, Spring Flowering  
Plants, Hardy Climbers, Choice Hardy  
Flowering Shrubs, Splendid Plants for  
Cool Greenhouse, &c.

ALL STRONG HEALTHY PLANTS.  
THE BEST I HAVE EVER HAD TO  
OFFER. EVERY PLANT A BARGAIN.

Named, carefully packed and guaranteed  
to arrive in excellent condition. Stock  
your gardens with really excellent plants.

**Mrs. PYM (F.R.H.S.) & CO.**  
10, Vine House, Woodston, Peterboro'

Please mention THE GARDEN when writing.

# REAMSBOTTOM & CO'S GAYGARDEN ST. BRIGID ANEMONES

NONE GENUINE WITHOUT OUR GOLD MEDAL SEAL

Wonderfully improved in Form and Colours.

FEW FLORAL SIGHTS CAN  
COMPARE WITH A GOOD  
BED OF THEM.

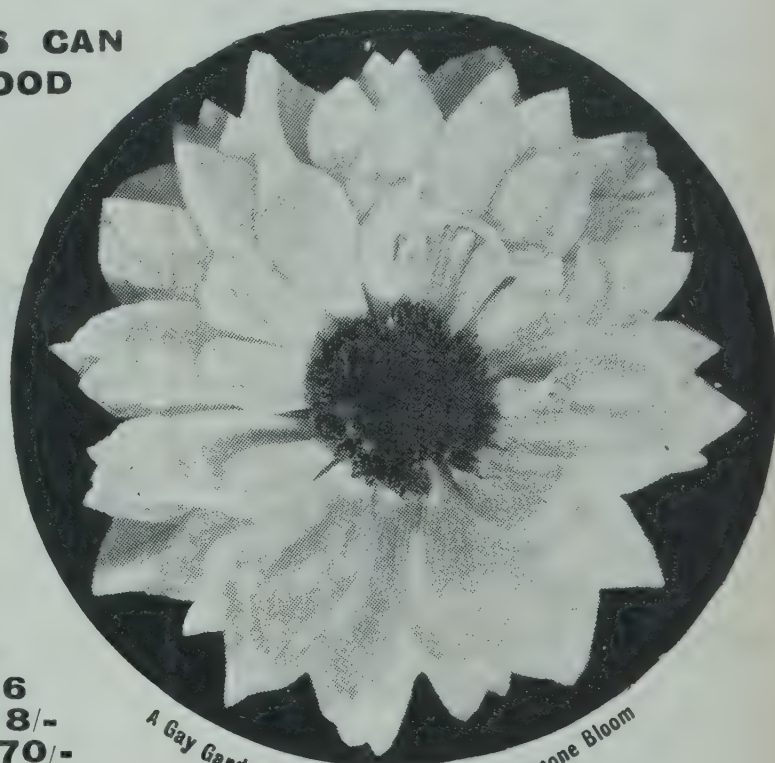
## PLANT NOW.

REAMSBOTTOM & CO.'s  
LATEST IMPROVED  
"GAYGARDEN"  
GOLD MEDAL ST.  
BRIGID ANEMONES

are the finest in the world.  
NONE ARE GENUINE WITH-  
OUT OUR GOLD MEDAL SEAL

12	..	..	..	3/-
24	..	..	..	5/6
50	..	..	..	9/6
100	..	..	..	18/-
1,000	..	..	..	170/-

Full Cultural Directions sent that  
will ensure success to every Amateur



A Gay Garden Gold Medal St. Brigid Anemone Bloom

## ALSO PLANT NOW

**DELIGHTFUL, FRAGRANT, SPRING-FLOWERING AURICULAS.** Lovely rich velvety colours, vastly superior to those usually seen. If you do not appreciate Auriculas, try ours, and you will be delighted. 6, 2/6; 4/9 doz.

**CARNATION, EARLY FLOWERING FRENCH.** Single and giant double flowers of exquisite mixed colours, very fragrant, 6, 2/-; 12, 3/6.

**ASTER KING GEORGE (NEW).** Extra large-flowering Michaelmas Daisy; huge bluish-violet blooms, 1/6.

**MYOSOTIS ROYAL BLUE.** Dark intense electric blue; strong grower. 15, 1/6; 100, 7/6.

**MYOSOTIS VICTORIA.** (Hen and Chickens Forget-me-not). Sweetest little blue. 12, 1/6; 24, 2/9; 100, 8/6.

**CHRYSANthemum MAX. FIANCEE (NEW).** Showy new large white Ox-eye Daisy; strongly recommended, 1/-.

**LUPINUS POLYPHYLLUS.** Purple and white, 4, 1/3; 12, 3/-.

**FRAGRANT TREE LUPIN.** White. 2, 1/4; 6, 3/6.

**LUPINUS ROSEUS** (Pink Lupins). Our glorious strain of these hardy perennial Lupins, most lovely shades of pink. 2, 1/3; 6, 3/-.

**PHLOX EVELYN (NEW).** Large flowers and immense size, richest salmon-rose shade, an exquisite novelty, 1/6.

**PHLOX FIREGLOW (NEW),** huge trusses of brilliant orange-scarlet, with dark centre, 1/6.

**PAPAVER KING GEORGE** (striking novelty), bright scarlet, with fimbriated petals. 1/3 each.

**PAPAVER MAHONY.** Chocolate colour, rare. 1/6.

**GAILLARDIA GRANDIFLORA.** Our splendid improved extra large-flowered; choicest rich yellow, with crimson or brown markings. 4, 1/4; 12, 3/6.

**GENTIANA ACAULIS.** The glorious Blue Gentian, prized wherever a hardy flower is grown. Very dwarf. Likes a loamy soil, with broken stones mixed through it. Extremely hardy. 3, 2/3; 12, 7/6.

**PINKS, EXCELSIOR,** blush with scarlet centre. A strong favourite, 6, 2/6; 12, 4/6.

**PRIMULA OBCONICA GRANDIFLORA HYBRIDS.** Very beautiful Primulas; most valuable window or garden plants; never seen to be out of bloom, 3, 1/6; 6, 2/9; 12, 5/-.

**SWEET WILLIAMS.** Wonderful Giant Mixture. Our strain is a wonderful variety of colours, and customers are always delighted with the very large flowers. Giant mixture. 15, 1/9; 50, 5/-; 100, 9/6.

**EDELWEISS.** This very hardy, much-sought-after alpine plant has pretty silvery foliage, with star-shaped, silvery flowers. 2, 1/3.

**HOLLYHOCKS.** Single Mixed. Our selection, mixed, strongly recommended. 6, 2/-; 12, 3/9.

**BERGAMOT (MONARDA DIDYMA).** The deliciously scented true fragrant Bergamot, with striking scarlet flowers, 2, 1/4.

For other varieties, also Roses, Fruit Trees, etc., please see our ILLUSTRATED CATALOGUE FREE. All Cash orders of 15/- value and over carriage paid or post free, packed by experienced hands. For Free Delivery, smaller orders, 5/-, 10/-, add respectively for Carriage or Postage, etc., 1/- and 1/9. Safe Arrival and Satisfaction Guaranteed.

# REAMSBOTTOM & CO.

Tower Nurseries, West Drayton, Middlesex (Also at Geashill, Ireland)

Please address to Tower Nurseries, WEST DRAYTON, and mention THE GARDEN when writing.

**FREE MONEY SAVING BONUS COUPON.** — 20 per cent. worth of Additional Plants FREE and delivered carr. paid on orders over 15/- value if you enclose this coupon. — Quality superb. — T. G.



# YOU — OR THE WORMS?

You take pride in the lawn—a real pleasure to behold—then worms make an unwelcome appearance and the grass gets disfigured with mud-casts.

These mud-casts spoil the hard, level surface of the grass, be it used for recreation or otherwise.

It is quite a simple matter to get rid of the worms. Just sprinkle

## COOPER'S POWDER WORMKILLER

over the grass, water it well in, and see how the worms come to the surface. Then sweep them up. You have destroyed the worms and the mud-cast nuisance is over.

Cooper's Wormkiller costs—for 2 lb. tin 1/-; 7 lb. bag 1/9; 14 lb. 3/-; 28 lb. 6/-; 56 lb. 10/6; 112 lb. 18/6. Special quotations for ton quantities.

For the destruction of daisies, dandelions and similar growths in the grass, there is nothing better than

## COOPER'S LAWN SAND.

It fertilizes the lawn as it kills the weeds. TRY IT.

Prices—2 lbs. for 1/3; 7 lb. bag 2/6; 14 lb. 4/-; 28 lb. 7/6; 56 lb. 13/-; 112 lb. 25/-. Special quotations for ton quantities.

If your local agent cannot supply your requirements, please write to

**WILLIAM COOPER & NEPHEWS, Ltd.,  
BERKHAMSTED.**

There's satisfaction in every "Cooper" product.

## SMITH'S "SWIFT & SURE" NON-ARSENICAL WEED KILLER

Non-poisonous. Perfectly safe to use.  
Supersedes all others.

1 GALLON to make 50 GALLONS of LIQUID  
**10/-** carriage paid. Package free.

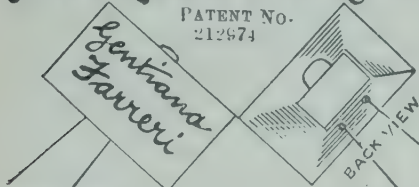
SMITH'S 'PERFECT' LIQUID &  
POWDER WEED KILLER.

Sole  
Makers: **MARK SMITH, LTD.,  
LOUTH, LINCOLNSHIRE.**

Please mention THE GARDEN when writing.

## The WIZARD Plant LABEL

PATENT No.  
212974



Made in Red Pottery, 2 1/2 x 1 1/2 ins., with rustless wires.  
12 in., 2/- doz.; 7 in., 1/7 doz. 1 1/2 x 1 in., with wires 6 in.,  
1/4 doz. For tying on. 1/6 and 1/3 doz. Waterproof  
Ink, 9d. and 7d. bot. Crow Quills, 2d. Postage extra.

**E. TORKINGTON . NEW HALL . MAIDENHEAD**

Please mention THE GARDEN when writing.

## FERTILISERS.

LAWNS, 20/-; FRUIT TREES, VINES, 19/6;  
GENERAL GARDEN USE, 17/-;  
WORM KILLER, newly introduced, 19/-  
Per cwt., carriage paid. Also all other fertilisers.

**HY. RICHARDSON & CO.,  
Skeldergate Bridge Works, YORK**

Please mention THE GARDEN when writing.

## FLOWERS and VEGETABLES

Flowers and Vegetables  
will not give of their best  
unless they receive a dress-  
ing of Nitrate of Soda.

The difference can be seen  
in one week.

Write for pamphlets, entitled, "Successful  
Gardens for Every Amateur," "The Man-  
aging of Orchards and Fruit Trees,"  
supplied gratis and post free by THE  
CHILEAN NITRATE COMMITTEE,  
Friars House, New Broad Street, London,  
E.C. 2.

## Nitrate of Soda

## ACME WEED KILLER AND LAWN SAND

Weed Killer.—Tin to make 25gals., 3/-; for 50gals., 6/-;  
Postage 9d. on each; for 150gals., 15/- carriage paid.

Lawn Sand for destroying weeds and moss.—28lbs., 7/-;  
56lbs., 13/-; carriage paid on 1cwt., 25/- Fertilizes the  
grass.

**Acme Chemical Co., Ltd., Tonbridge, Kent**

Please mention THE GARDEN when writing.

## KILOGRUB



Exterminates all Garden Pests in the soil.  
Your Seedsman has it.

Tins:—9d., 1/6, and 2/6.

Bags:—1-cwt. 6/6; 1/2-cwt. 9/6; 1-cwt. 15/-.

Write for particulars to the manufacturers—  
**JOHN PEAK & Co., Ltd., Wigan, Lancs.**

Please mention THE GARDEN when writing.

## CHEAP GOVERNMENT WIRE !!!—Great

for training fruit trees, peas, beans, hops, arches, greenhouses,  
tomatoes' logans, tying, fencing, etc. Strong, flexible, steel-  
stranded and waterproof covered. Several thicknesses from 19/6  
per mile (full 1,760 yards). Postcard to-day for free samples  
and list of 300 bargains.—GREEN'S GOVERNMENT STORES, 121,  
Albert Street, Lytham.

## WALL AND WATER GARDENS. With

chapters on rock gardens, heath gardens, and paved water  
gardens. By GERTRUDE JEKYLL. 7th edition, revised. 17s. 6d.  
net; by post, 18s. 4d.—Published at the Offices of "COUNTRY  
LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

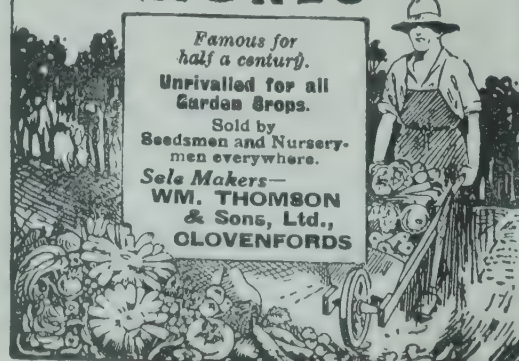
## SHRUBS are becoming more and more

the fashion in gardening. "Shrubs for Amateurs," Mr. W. J.  
Bean's new book, is the best on the subject at a reasonable  
price. 5/- net. Published at the Offices of "COUNTRY LIFE,"  
LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## THE CULTURE OF CHRYSANTHEMUMS.

By W. WELLS, 2/6 net; cloth, 3/6 net; by post 6d. extra.  
—Published at the Offices of "COUNTRY LIFE," LIMITED,  
20, Tavistock Street, Covent Garden, W.C.2.

## THOMSON'S MANURES



## GLORIOUS GLADIOLI

No garden is complete without these Lovely Flowers, and  
for house decoration they have few equals.

**SPECIAL OFFERS. GRAND VALUE.**

100 splendid corms in 10 varieties as under:—

America  
Empress of India  
Glory of Holland  
Halley  
Marchal Foch

**5/-**

Panama  
Prince of Wales  
Schwabens  
War  
Willbrink

250 for 11/6

500 for 22/6

1,000 for 40/-

**PRIMULINUS VARIETIES**, in splendid mixture  
Per 100, Second size, 5/-; first size, 7/6; extra choice, 10/-  
Carriage Paid. **IMMEDIATE DESPATCH.**

Ask for special list and compare our Prices.

**LONGSTAFF & SONS, (F.R.H.S.)  
Near CHELSFIELD STATION, Kent.**

Please mention THE GARDEN when writing.

**30/-  
SET**

Carriage paid



Money returned if  
goods not approved

**DRAIN  
CLEARING  
AND CHIMNEY  
SWEEPING MACHINE**

Malacca Canes with brass mounts.  
Chimney brush and archimedean  
drain cleaner included.

30ft. 30/- 40ft. 37/- 50ft. 47/-  
60ft. 55/- 80ft. 72/- Carr. paid

**S. TYZACK & SON**

(Dept. G.2),

341, 343, 345, Old St., London, E.C.2

Please mention THE GARDEN when writing.



**WATTLE  
HURDLES**

6 feet long

24, 30, 36, 42, 48, 54, 60, 72 inches high

PLEASE STATE QUANTITY

**ERNEST R. SMITH & CO., Haslemere, Surrey**

Please mention THE GARDEN when writing.

## The Silver Medal Horse Shoe Boiler

## MAKE THE MOST OF YOUR GREENHOUSE

and install a "Horse Shoe"  
Boiler complete with pipes.  
Always a steady heat to ensure  
a succession of thriving plants,  
and—most important—Time in  
attention and Fuel consumption  
reduced to a minimum.

38,000 SOLD.

Used in the R.H.S. and  
Botanic Gardens and by  
thousands of satisfied  
Amateurs.

**COMPLETE APPARATUS  
— FROM STOCK —**

New Booklet "E" and  
reduced prices, post free.

**Chas. P. Kinnell & Co. Ltd.**  
Southwark St  
LONDON, S.E.1. Phone  
HOP 362  
(3 LINES)





## FOR SPRING PLANTING

THE EXECUTORS OF THE LATE

## ANTHONY WATERER

BEG TO OFFER

## STANDARD TREES

In Great Variety

Consisting of:

LIMES, PLANES, ELMS, etc.

EVERGREEN and DECIDUOUS  
SHRUBS, viz.:

BOX, green and variegated, 3 to 8 ft.

HOLLIES, Common, 5 to 8 ft.

" Variegated and Green varieties, 2 to 6 ft.

THUOPSIS BOREALIS, 10 to 12 ft.

CUPRESSUS LAWSONIANA, 12 to 14 ft.

SPRUCE FIRS, 6 to 8 ft.

CEDRUS ATLANTICA GLAUCA, very fine, 10 to 14 ft.

OSMANTHUS, PHILLYROEAS, SPIROEAS, LILACS,

VIBURNUMS, etc.

## GOLDEN YEWS

A magnificent Stock in all shapes and sizes from  
2 to 10 ft.

AZALEAS in great variety, 2 ft. to 8 ft.

RHODODENDRONS, without doubt the finest stock  
in the trade of named varieties 2 to 6 and 8 ft.RHODODENDRONS, Standards, in best named  
varieties.HARDY HEATHS in great variety, and a good stock of  
General Nursery Stock.

CATALOGUES UPON APPLICATION.

Enquiries and Inspection invited.

KNAP HILL NURSERY  
Woking Station :: SURREY

Please mention THE GARDEN when writing.

## SPRING PLANTING.

THE PRESENT IS A GOOD TIME TO PLANT  
HARDY PERENNIALS, ALPINES, ORNAMENTAL  
TREES AND SHRUBS, CLIMBING PLANTS.Large and varied stocks to offer in fine condition.  
DESCRIPTIVE CATALOGUES and Special  
Clearance Offers of Fruit Trees on application.THE BARNHAM NURSERIES, LIMITED,  
BARNHAM, SUSSEX.

Please mention THE GARDEN when writing.

## THE GREY GARDEN

BEAUTIFUL LAVENDERS, ETC., for planting now.

Lunstead, dwarf, bushy and free,  
specially good 30/- per 100 250/- per 1,000

Old English - - - 35/- " 100

Crappenhall (tallest) - - - 35/- " 100

Hutch (silvery foliage) - - - 35/- " 100

Cotton - - - 50/- " 100

Catmint (Nepeta Mussini) - 25/- " 100

Rosemary, extra bushy - - 6/6 " doz.

Southernwood (Boy's Love) 1-1½ ft. 6/6 " doz.

Cistus (C. laurifolius) 1-1½ ft. 10/6 " doz.

## YEWS! YEWS!! YEWS!!!

Come and see our Clipped Yews in Bird, Ball,  
and many shapes, £5 5 0 to £26 5 0 each.BAMBOOS in 37 species and varieties.  
Cheap collections of Alpines, Perennials,  
Water Plants. Catalogues Free.

HILLIER &amp; SONS, West Hill Nurseries, WINCHESTER.

Please mention THE GARDEN when writing.

## BEDALE ROSES, FRUITS AND HARDY PLANTS

Full descriptions in Catalogue, Free on Request. Mention "The Garden."

## 12 GIANT ORIENTAL POPPIES for 7/6

Duplex, light scarlet, nearly full double; Joan Pybus,  
salmon-pink; Joyce, rich cerise shade; King George,  
scarlet, fringed; Mrs. Harkness, apricot-salmon;  
Mrs. Perry, salmon; Nancy, large deep crimson;  
Perry's White, pure white; Princess Ena (the  
Tulip Poppy); Princess Victoria Louise, rose-sal-  
mon; Rembrandt, brilliant scarlet; William of  
Orange, pretty light orange.12 Giant-flowered Delphiniums. All  
named, choice varieties, 18/-

## 2 NEW ORIENTAL POPPIES

Ethel Swete, brilliant rich cerise, distinct from all  
other shades. Received Award of Merit from R.H.S.,  
London. 1/6 each; 15/- doz.  
Mrs. H. G. Stobart, brilliant cerise-pink, charming,  
good habit; both are vigorous growers. 1/6 each;  
15/- doz.Special Offer.—3 of each for 7/6. Carriage paid for  
cash with order.12 Giant-flowered Delphiniums. Ex-  
tra choice, best varieties, 30/-

G. GIBSON &amp; CO., LEEMING BAR, BEDALE

Please mention THE GARDEN when writing.

## CARNATIONS for Garden &amp; Greenhouse

PERPETUAL FLOWERING  
(Greenhouse) VarietiesWe carry large stocks—  
rigidly selected—of all the  
best varieties. For im-  
mediate flower we offer  
fine plants in 6" pots in  
bud. Young stock, ex 3½"  
pots, stopped and broken,  
to pot along, or plant,  
ready now.All Collections are carr.  
and packing paid for cash

6 plants	6" pots	ex 3½" pots
in variety	24/-	8/6
12 " "	45/-	16/-
25 " "	80/-	30/-

## ALLWOODII (Half Pink, half Carnation)

New and deligh. ful self colours have been introd ced in  
the ever popular Allw odii—the hardy plant which  
grows and flowers in eve y garden and win ow-box.  
The collections q oted below are exce t o al value, and  
include many quite new and unique varieties.6 plants in variety, 6/6 12 plants in variety, 12/-  
25 plants in variety, 22/6

## HARDY PERPETUAL BORDER CARNATIONS

Will eventually supersede the old Border type, being  
hardier, fr er flowering, carrying bolder and more  
swe tly perfumed flowers. A much wider range of  
colour is ow obtainable, and the following collections  
are first-class value, embracing many of the later kinds.

All plants ex 3½" pots—imm diate delivery.

6 plants in variety, 15/- 12 plants in variety, 27/6

CATALOGUE of all CARNATIONS POST FREE on REQUEST  
but rder the above coll ctions at once for prompt  
delivery, and exceptional value.

Allwood Bros

The leading  
Carnation Raisers  
and Specialists  
in the World.

Dept. 4, Haywards Heath, Sussex.

## NEW CHINESE RHODODENDRONS

A few superb hardy novelties. Plant in April &amp; May

R. Clementinae (Kingdon Ward 4177), white, suffused  
pink, darker markings. First discovered by G. Forrest  
in 1913. 4-5ins 7/6R. racemosum (Forrest 19404), pink. This is Forrest's  
finest form; a very suitable shrub for rock gardens or  
mass planting. 9-12ins. 7/6R. fastigiatum forma (Kingdon Ward 4456). Another  
fine dwarf species with deep purple flowers and crimson  
style. 12-16ins. 7/6R. mullense (Kingdon Ward 4023), bright sulphur  
yellow 9-12ins. 7/6R. cephalanthum Series (Kingdon Ward 3998), varying  
shades of a rose pink to milk white 7/6R. Arboreum Series (Kingdon Ward 3784), flowers of the  
deepest crimson. 6-12ins. 10/-R. Lapponicum Series (Kingdon Ward 4184), brilliant  
lavender-blue. 6ins. 7/6R. yunnanense (Kingdon Ward 4309-4322), bluish pink  
with brownish crimson markings, one of the best species  
for the ordinary garden, vigorous under almost any  
conditions. 8-12ins. 5/-R. ficolacteum (Kingdon Ward 4509), pure white with  
a crimson blotch; magnificent foliage. Worthy of the  
best situations in the garden. 5-6ins. 10/-R. Virgatum Series (Kingdon Ward 4994) of the deepest  
pink hue; autumn flowering. 10-12ins. 5/-R. Delavayi (Kingdon Ward 3948), scarlet, with black  
glands. 9ins. 10/-R. Kingdon Ward 5001, flushed pale pink, winter  
flowering. 6ins. 5/-

This fine set of twelve for £4 4s.

Full list of hundreds of new Rhododendrons on application.  
When ordering please mention this paper.

HILLIER &amp; SONS, Tree Specialists, WINCHESTER

Please mention THE GARDEN when writing.

## KING'S ACRE CATALOGUES

are convincing, original and interesting, and the personal  
service offered, embodies the principle of "The little more and  
how much it is," which has made our name world famous.

## KING'S ACRE

is the home of Horticultural Ideas, with trained, practical,  
experts specialising in all branches of Horticulture, each of  
whom is at your service.

## KING'S ACRE

Nurseries are one hundred and forty acres in extent  
and were originally established in the year 1785.  
Our specialities have been awarded 87 GOLD MEDALS,  
a fact which testifies to the excellence of our stocks.

## KING'S ACRE

should be consulted whenever you require either Useful  
or Ornamental additions for Garden or Estate. Your  
enquiries will receive immediate attention, and all  
information and catalogues are sent free on request.

All enquiries to:—

KING'S ACRE NURSERIES, Ltd. HEREFORD

Please mention THE GARDEN when writing.



THE MOST POPULAR AND  
PROLIFIC PEA EVER RAISED

# WEBBS' "SENATOR"

Awarded the Royal Horticultural Society's  
First-class Certificate

This remarkable Pea has achieved an unrivalled reputation for cropping and cooking quality. Its beautifully curved pods are produced in pairs, and the peas are deliciously sweet in flavour. The original stock of "Senator" can only be obtained from Messrs. Webb. Try it this season and you'll always grow it. Price, — 2/- per pint, 3/6 per quart —

## WEBBS' COLLECTIONS OF VEGETABLE SEEDS

5/6 collection contains 21 choice vars.

8/-	"	"	30	"	"
10/6	"	"	36	"	"

POST FREE

ILLUSTRATED CATALOGUE  
(Seeds, Manures, etc.), post free

WEBB & SONS, LTD.

The King's Seedsmen STOURBRIDGE

Please mention THE GARDEN when writing.

## Yes! Hydrangea Mad!! Why Not?

A fascinating and glorious feeling that  
gives real enjoyment to its possessor.

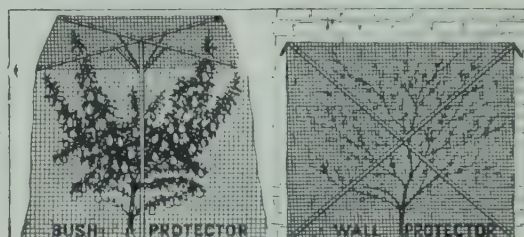
### THE MODERN HYDRANGEA

gives this delightful sensation and everyone can enjoy it by growing these wonderful new varieties; they are easy to grow, last longer, and are more effective in the greenhouse or garden than any other plant. The colours are a surprise and a delight, ranging from white, mauve, soft pink, rich pink, rose-pink, deep rose, salmon-pink, rosy red, clear red, blue, mauve-blue, blue on old rose, etc. Their cost is moderate compared with their great decorative value. H. J. J. has probably the finest collection in the world, and would welcome a visit or enquiries from all who are interested in Hydrangeas. H. J. J. offers his selection 12 young plants in 12 distinct named varieties for 12/6. 12 ditto large, ex 5in. pots, 25/-; 12 ditto large that will give 4 to 8 large trusses, for 50/-. Large specimens for Tubs, 15/- and 21/- each. All delivered free for cash with order.

SEND FOR CATALOGUE.

H. J. JONES, Ryecroft Nurseries, LEWISHAM S.E.13

Please mention THE GARDEN when writing.



## FRUIT TREE PROTECTORS

Against BIRDS, FROST, COLD WINDS, WASPS.  
Patents for Wall, Pyramid and Bush Trees

## IDEAL FRUIT CAGE

The cheapest and most perfect  
Apply for new Illustrated Booklet giving his

## SYSTEM OF FRUIT CULTURE

MAJOR C. WALKER, Dept. G., Brecon, S. Wales

Please mention THE GARDEN when writing.

## Notes from Maidstone.

### DELPHINIUMS

It is still safe to plant Delphiniums. Our List, which will be sent post free contains all the best varieties, such as Rev. Lascelles, The Alake, King of Delphiniums, Mrs. Shirley, Mrs. Townley Parker, Lord Derby; while the beautiful nemophila blue Queen Mary is now offered at the special price of 2/6 each, as we have worked up a good stock.

IRIS may still be planted, and we shall be pleased to send our List.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Maidstone.

Established 1796.

No. 1.

The Private  
Owner



# Men who appreciate

The  
**ATCO**  
MOTOR MOWER

His opinion is fully expressed in the letter reproduced above. Let us prove ATCO claims by arranging a free demonstration on your own grass—without obligation.

16 inch Model	£50	22 in. Model	£75.	30 in. Model	£95
Personally Delivered and Guaranteed 12 months					
5 per cent. for cash in 7 days.					

All who take a pride in their Lawns should send for free ATCO Booklets, "Turf Needs" and Notes of Praise."

**CHAS. H. PUGH, Limited**

Whitworth Works, 31, Tilton Road, BIRMINGHAM

STATION LOCKHEE  
TELEPHONE LOCKHEE.  
TELEPHONE 8 LOCKHEE

HALLEATHS  
LOCHMABEN.  
DUMFRIESSHIRE

26th November 1923.

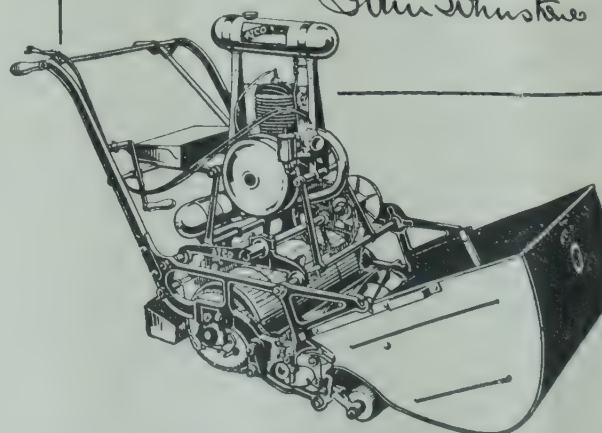
Messrs. C. H. Pugh Ltd.,  
Atco Lawn Mower.

Dear Sirs,

I have pleasure in stating that the Atco you supplied me with just two years ago has given much satisfaction both as regards efficiency and as a time and labour saver. You are at liberty to use this letter as best suits you.

Yours truly,

John Whistler







VOL. LXXXIX.—No. 2787.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
*Editorial Offices:* 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2.  
*Offices for Advertisements:* 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
 Entered as Second-class Matter at the New York, N.Y., Post Office.

APRIL 18, 1925

## UNSEASONABLE PRODUCE

THERE is a general belief that efficiency of transport is one of the main factors in the world's progress.

There is no doubt that the speed at which produce from all corners of the globe is carried to this country has brought the gastronomic seasons together. This brings a constant influx into the British Isles of unseasonable garden and orchard produce, much of it at a price which is practically within reach of all pockets. By this I do not mean such fruits as oranges and bananas, which, although obtainable the year round, nevertheless have their origin in tropical or sub-tropical countries. Neither of them are capable of outside cultivation in this country, so they are by nature exotic. Rather do I refer to such flowers, fruits and vegetables as are in common cultivation in this country during their proper season, but are also supplied from abroad at times when the home-grown kinds are unobtainable.

They can be seen in any fruiterers or florists; and what a varied collection! Lilac from the South of France in January, artichokes from Brittany in February, plums, peaches, pears and nectarines from the Cape throughout the winter, new potatoes from Algiers in December, marigolds from the South of France in January, French beans from some place or another all the year round. This is only a selection. Many of them are of excellent quality, but I think it is safe to say that they are never so good as those grown at home. Home-grown forced garden produce, owing to its expense, has only a limited appeal and so is confined to a small public who like novelty, but this general importation, although useful, is not altogether satisfactory.

Surely much of our pleasure in our garden produce is that of anticipation. We look forward for days ahead to the first dish of succulent young peas from our garden. The smaller the supply the greater the pleasure. Even Brussels sprouts and cabbages are looked forward to at the beginning of the season. Towards the end even of the pea season the edge is taken off our appetite and we look upon them as a matter of course as an ordinary vegetable. Now, supposing that all the good things in vegetables and fruit are obtainable the year round, we shall not only become satiated with them, but our taste will be blunted. We shall no longer be able to masticate our peas with the same pleasure, in fact, all peas will taste alike to us. Most of the best things in the world come to London, but a plethora of goodness never made a man an epicure.

I remember at school being taught that the downfall of Rome was mainly owing to the banquets of nightingales tongues

and other out of the way delicacies that became the fashion among Roman society; it would be a tragedy if historians a thousand years hence were to lay all the troubles of the present era to a sort of gastronomic effiteness.

## ICE STORMS

Much as we may grumble at our climate, we have a great deal to be thankful for. Among other things we do not suffer from ice storms, which is a most unpleasant form of weather, for it always causes untold damage to trees. These storms are brought about by rain falling from a warm upper strata of air on to a belt of frost near the ground; the consequence is that every branch and twig is covered with a coating of ice which ultimately becomes so heavy that the branch cannot bear the weight and comes crashing to the ground; I have seen twigs three times their normal diameter from the great coating of ice surrounding them and thin grass stems enlarged to the size of candles. Apparently the latest town to suffer from such a visitation is St. Louis, where the damage done to trees has been enormous. I was in Boston in November, 1921, when the city experienced one of the worst ice storms on record. Although Boston suffered severely, it was nothing compared to Worcester, Mass. I went there on the next day and found hardly a whole tree standing in a town famous for its fine timber. I have forgotten the exact number of trees totally destroyed in the town area, but it ran into many thousands. These storms are usually very local in their action; for a few miles beyond Worcester there was a horrible scene of desolation with broken trees, telegraph poles snapped off, and wire lying tangled on the ground, while in the next valley, the moment we were over a small divide, conditions were quite normal.

E. H. M. C.

## AMONG OTHER ARTICLES IN OUR NEXT ISSUE WILL BE:

SHRUBS FOR THE ROCK GARDEN, by Dr. R. Lloyd Praeger.

SNAPDRAGONS.

A WANDERER'S NOTE BOOK, by E. Enever Todd.

CHEMICAL MANURES AND THEIR USES.



# OLD - FASHIONED FLOWERS

THERE ARE NO SUBJECTS WHICH LEND MORE CHARM AND GRACE TO THE GARDEN THAN OUR OLD - FASHIONED AND TIME HONOURED FLOWERS.

IT is a matter for regret that so many old-fashioned flowers—fostered almost like children by our forefathers—should have been banished from our gardens, elbowed out by the introduction of new species, or varieties of those then existing in the belief that these later introductions were so much in advance of what had been previously grown. Probably, had they waited a few years before they took such a drastic step, many of them would still enrich our gardens of to-day. Cultural details of practically every class of plant grown are far in advance of what they were some sixty years or more ago, so it is more than probable that, had owners and growers retained these old-fashioned flowers for a time, many would have held a different opinion and given more attention to their requirements. So many had a charm of their own which is lacking in some of the flowers that are barring their return to the position and esteem they once held among flower lovers.

What about fragrance? There are many new species that lack that sweet perfume so predominant among those old flowers that adorned our gardens a decade ago. Take roses as an instance. It is true raisers are taking more pains to instil fragrance into the flower just now, but there are scores deficient of smell, and it is these that have ousted such good old varieties as Lamarque, whose pure whiteness and sweetness entitle it to a foremost place among climbers, thriving best on a warm wall. Then there are the moss roses, so frequently found in old gardens more than half a century ago, but now not half as much grown as their merits deserve. Besides Lamarque, just mentioned, there is another very old variety among the noisettes, Aimée Vibert, very fine as a pillar, its clusters of pure white blossoms, though small, commanding attention; it will thrive almost anywhere, in any position. For a good autumn rose what is better than that old Bourbon, Souvenir de la Malmaison, a large full flesh-coloured rose and very sweet; and many of the old chinas, also, supplied a wealth of flowers varying in colour from early April up to the end of the year. While speaking of roses it is well to mention the old yellow and white Banksias, whose clusters of small double flowers cannot fail to please. These require a warm wall and a light hand in pruning, as also does that very fine single rose bracteata, better known as the Macartney rose, white with showy yellow stamens, and flowering well into November. These last-mentioned varieties thrive and flower luxuriantly on a south-west wall at Bicton, East Devon. Yet one other I must mention, the old York and Lancaster rose, whose striped flowers enamoured our forefathers, yet it is rarely seen nowadays.

It is very hardy and a most interesting border plant, full of vigour.

The dictamnus or fraxinella is one of the oldest inhabitants of our gardens and is a capital border plant, easily raised from



MULLEINS ALWAYS LOOK THEIR BEST WHEN FREELY GROUPED.

seed; perhaps the white variety is the best, as it is so useful for cutting, but the purple is very pretty and well worth growing. These are interesting plants, frequently alluded to as the "burning bush"—being smothered with a resinous exudation on the stems they burn quickly if a light be applied towards evening—and are excellent as an edging to a large bed or border of flowering shrubs.

The mulleins or verbascums thrive in any ordinary garden soil and show best when freely grouped. They go on flowering for a long period, while their showy flowers, mostly yellow, stand out well above the foliage: *V. olympicum* probably being the best, reaching 6ft. in height or more. *Salvia patens*, though but half-hardy, is a fine subject for summer decoration of the outside garden; its intense blue flowers call for special mention, but it is no use trying to grow it in poor soil, or the spikes will be very indifferent, but given good culture it is sure to please. Treatment as for the dahlia during winter is all that is necessary to retain the plants from year to year, and our gardens would be much enriched by a freer use of this very excellent sage. The dicentras—perhaps better known in the old days as dielytra—are charming hardy herbaceous plants, *D. spectabilis* being one of the best and a very old inhabitant, frequently termed



PULMONARIA, THE LUNGWORT, HAS ATTRACTIVE FLOWERS AND FOLIAGE.



"bleeding heart" by the cottage folk and highly prized by many of them.

*Lychnis chalconica* was a special favourite long years ago with its bright scarlet clusters of flowers, long retained upon the plant, which added to its usefulness as a decorative perennial in our borders. Here again the newer varieties have almost driven it out of cultivation. Another old scarlet flower, *Pentstemon Murrayanus*, is now seldom seen, owing, no doubt, to similar circumstances; nevertheless, it was much admired and stood by us for many a year under fair treatment. *Commelina cœlestis* has a lovely blue flower—true, not very large, but freely produced on stems some 18 ins. in height. It winters well in the ground in Devon and Cornwall. It has thin tuber-like roots similar to *Salvia patens*, and on its introduction over a century ago was grown under glass. The flowers and habit of the plant remind one of the *tradescantias*.

Among the Lily order few of us appear to have been able to cultivate so successfully as did our forefathers *Lilium candidum*, the cottage lily. We know of its presence in most

long cultivated by cottage folk, and many a fine old bush can frequently be met with in the western counties, where they appear to thrive best, not being subjected to hard winters which kill the flower buds. For want of a better name—not knowing the correct one—cottagers often call them "changeables," on account of the flower heads changing colour. In *Bocconia cordata*, the plume poppy, we have an excellent foliage plant independent of the terminal panicles of creamy white flowers, which are produced in abundance when the plant is well grown. It is at home in a large bed among shrubs or in the herbaceous border among other perennials, but is far from being common in gardens. *Malva moschata* I grew largely in the herbaceous border nearly forty years back, finding it very useful for cutting. It grows some 2 ft. high and is sweetly scented, but I have not come across a plant for some years now.

The *tradescantias* or spiderworts are worthy of more extended culture, the blue *T. virginica* and var. *alba* (the white variety) are to be found in quite small gardens around London, showing that it is a good town plant, but in the larger gardens



THE BURNING BUSH OR CANDLE PLANT, *DICTAMNUS ALBUS*, FORMS AN EXCELLENT BORDER.

cottage gardens of bygone years, but it is now rarely seen in good condition. The finest show that has come under my notice was of plants growing and flowering abundantly close to the stem of an old standard pear tree in Devonshire, with many of its healthy bulbs fully exposed to the weather and packed as tightly as a rope of onions; no transplanting or division had evidently been done for a number of years. My advice is, if they are doing well let them alone. *L. candidum* was introduced into this country as far back as 1596 and has always been a universal favourite, for the flowers are of the whitest and very fragrant.

Good beds of the old Persian and Turban *ranunculus* are few and far between compared with some thirty years back; the flowers are very beautiful and well repay the cultivator for any extra trouble spent in the preparation of the site and soil so necessary to ensure success. Thorough drainage 18 ins. or so below the level of the soil, good loam, a little leaf-soil, and some well decayed cow-dung below planting level, will grow good flowers if tubers are planted in February. *Hydrangea hortensis* and its varieties are still with us, being

it does not appear to have held its own. Another of the herbaceous order, *Hesperis matronalis*, which has long been a most valued garden plant, the old cottager evidently knew how to cultivate, as it was frequently found in a thriving condition. The flowers are very sweet and come early into flower. The double kinds are especially good for indoor decoration when cut. The surest method of retaining the stock is to propagate by cuttings in early summer. *Plumbago* *Larpenæ* gives us another blue flower—we have not one too many of such colour towards the end of summer. A sunny position suits it best, and the finest colony that has come under my notice was close to the sea in South Devon, hanging over a stone wall on a very dry border that held its roots.

We older folk can remember the bright patches in the border afforded by *Monarda didyma*. Its deep red flowers always attracted attention, yet now how seldom we find it given a place even among herbaceous plants, or, if we do occasionally come across it, there does not appear to be that robustness among them as of old. They thrive, though, in ordinary garden soil, but should never suffer for the want of



moisture. *Polemonium caruleum* and its white variety are good dwarf plants for the herbaceous border, and, though not showy, are interesting and likewise very free. Here the plant is known as Jacob's ladder to those with little experience in gardening matters. The variety *himalayanum* is well worth growing.

The hardy geranium (cranesbill) gave us a host of colours and is still to be found in variety where old-world flowers are admired. Growing in almost any soil and reaching some 2ft. in height, the Persian bellflower, *Michauxia campanuloides*, is a most interesting plant, but unfortunately does not appear to have a long life with us in this country. A somewhat elevated or dry position with a slight protection during winter gives it a better chance of pulling through, and I was particularly fortunate with its culture at Bickton.

*Galega officinalis* is another old garden friend. Free-flowering and useful for cutting, this blue and its white variety *alba* should find a place in the border; the foliage, too, is good, and it is altogether a desirable plant to cultivate. *Pulmonaria*, the lungwort, is valuable on account of its

early flowering and its handsomely marked foliage with splashes of white. The plant is very dwarf, and has blue or white spikes of flowers. It thrives well in shady nooks, and it is a pity that it is not more frequently met with in gardens. In the old days it was supposed to be a cure for lung disease, hence the name lungwort.

*Aconitum* (monkshood) is a very old garden plant, yet it is only now and again that one sees it, although if left undisturbed it forms quite a colony, doing well in shady parts of the garden. It is easily increased by division, but no particle of root should be left about, as it is most poisonous. The alum root, *Heuchera sanguinea splendens*, is a really good front border plant with compact foliage, and the slender spikes of crimson flowers freely produced are valuable for cutting in early summer. Another evergreen plant, so valuable for mixing with cut flowers in large vases and yet seldom met with, is *Ruscus racemosus*, better known to-day as *Danæ racemosa* or Alexandrian laurel. It does not grow very tall—2ft. to 3ft.—but its finely cut long pendulous shoots are splendid for the purpose mentioned, and one can cut it indefinitely. J. MAYNE.

## THE MODERN GLADIOLUS

IN reading an article written about sixteen years ago on the gladiolus, the following passage particularly interested me, "However great our enthusiasm for the gladiolus may be, we have to acknowledge that it can hardly be classed as one of the great flowers of the people—it just misses greatness." At the time this was written, it was no doubt perfectly true, it would also have been equally true of the sweet pea less than thirty years ago. The modern gladiolus does not, in my opinion, "just miss greatness," and I feel sure that if the author of my quotation could have foreseen the wonderful results which crossing and inter-crossing the various types or species (particularly the *primulinus* species) have given us, he would undoubtedly have prophesied a glorious future for a flower which apparently did not then impress him.

Perhaps a close interest and fairly wide experience in sweet peas leads me to compare the two flowers, which, although differing in structure, resemble one another in character. Both flowers are seen to their best advantage when cut and used for house decoration, both are easily grown, adaptable and reasonable subjects. Almost any kind of soil and situation will suit either, they are both inexpensive and embrace a remarkably wide range of colours and shades. The keen attention of hybridists has been, and will continue to be, attracted to the sweet pea and the gladiolus on account of their latent possibilities. Comparing the two flowers still further, we find the sweet pea scores with its lengthy flowering period of individual plants and with its perfume; on the other hand, we have the comparatively long time for which a bunch of cut gladioli will last in a fresh, clean condition.

In my opinion the gladiolus has now attained that stage in its evolution or development which the sweet pea reached about twenty years ago and one can confidently predict a sharp rise in public esteem for the former without fear of serious contradiction or any undue stretch of imagination.

Just what measure of popularity the gladiolus will eventually attain, will depend mainly on the extent and rate of progress as regards improvements in form and colour. Of late years, progress in these directions has been rapid, and a very great many new varieties are each year being put on the market. There is, and will be, an increasing temptation to place novelties in commerce that are little or no improvement on existing kinds, just as in the case of other popular flowers—roses, sweet peas, etc. I sincerely hope raisers will endeavour to avoid this sure source of disappointment to growers, which is more serious in the case of the gladiolus than in almost any other flower. A sweet pea novelty at 1d. or 1½d. a seed is quite a different proposition from a gladiolus novelty at £1 or 30s. a corm.

Gladioli have been grown in this country for hundreds of years, and I expect there have been articles in *THE GARDEN* about them ever since it was first published, but from what I have observed, I feel sure the general flower-loving public here is only just becoming aware of their real value. In this respect, the Americans and Canadians are ahead of us; but when the ease of culture and the amount of pleasure the

gladioli give in the house is fully realised, their popularity will rival that of the sweet pea or the carnation.

Most of my readers will be aware that there are many different species of gladioli, mostly of African origin, but these have been intercrossed to such an extent that it is perhaps impossible to classify all modern varieties under their respective sections. We need only concern ourselves with two types, both autumn-flowering, *i.e.*, the large-flowering hybrids and the *primulinus* hybrids. These differ among themselves in the size, shape and placing of their flowers; but, generally speaking, the large-flowering hybrids have large, bold, wide-open blooms, arranged in a double row facing one way and placed fairly closely together on long, stout stems. The *primulinus* hybrids have smaller flowers, spaced farther apart on thinner stems, which are, however, wiry, quite strong, and in keeping with the size of the blooms.

Each of these types makes a different appeal to the flower lover. While there is something grand and stately, almost massive, in the splendour of the large-flowering varieties, the "prim." hybrids are light, graceful and so very dainty. One would use the large-flowering for decorating a church or in large vases and baskets for the hall or fireplace, but where a lighter effect is necessary, the "prims." excel. For table decorations they are really exquisite. Last season, I was not surprised to notice several first prizes carried off by "prims." in keen competition against such flowers as roses, sweet peas and carnations in strong table-decoration classes.

I hardly like to attempt to give a word picture of the colours which are now found in the gladiolus, one has to see them to realise their beauty, so clear and clean, and not a bit harsh in tone. Whites, creams, yellows, orange, salmon, lavender-blue, purple, rose, pink, scarlet, blood-red, nearly black, and innumerable attractive colour blendings and mixtures of two or more shades. In the *primulinus* hybrid section are found quite different colour tones, most of them true art shades: Oriental tints would, perhaps, best describe them. I had never seen such glorious salmon and orange shades before I knew "prims." It does not seem to matter whether one variety or a dozen are used in the same decoration, for they all harmonise so beautifully. I readily grant that some combinations blend better than others, but it is really a difficult matter to arrange any decoration of *primulinus* hybrid gladioli that will offend a critical artistic taste. It is easy to strike a colour discord with most other popular flowers that is as perceptible as a flat iron dropped on the piano keys. Another point in favour of the gladiolus lies in the fact that it rarely clashes with modern room furnishings, whatever may be the prevailing colour, and most varieties are also excellent under artificial light. No foliage other than their own is necessary to produce a pleasing effect and no flower is easier to arrange artistically.

I should most probably repeat what others have previously written in these columns if I described in detail the origin of the *primulinus* species, so I will just mention for those who may not know, that this small yellow gladiolus was found about twenty years ago on the banks of the Victoria Falls, South



Africa. Unlike any other species, its upper petals are bent over, forming a kind of hood, or umbrella, which botanists tell us was to protect the fertilising organs from the misty spray of the great waterfall. "Maid of the Mist," as it was aptly named, when hybridised with the larger-flowered types, released for our pleasure a beauty of colouring in its progeny transcending all previous introductions. It is no exaggeration to add that

"Maid of the Mist" has raised a "possible" to a "probable" flower, it has put the GLAD into "Gladiolus."

The flowering period is lengthy and a judicious choice of varieties will give a wealth of blooms from mid-July until well into October. Probably I shall not over-reach the mark in saying that modern gladioli are as exquisite as orchids, yet as easily grown as mustard and cress. CHAS. W. J. UNWIN.

## NOTES ON SOME VIBURNUMS

AS a genus the viburnum is not enough grown. This may appear to be a strange remark considering the fact that practically every garden has a fine bush of *V. Opulus* or *V. plicatus*, but it is true all the same. There are about thirty species which are hardy in the British Isles, and they are all of easy cultivation. I know of no genus of shrubs or trees whose general excellence is so great, combined with variety of form and shape. Perhaps a few notes on my experiences with this genus may be of interest to readers of THE GARDEN.

I had better begin with what I consider to be a blot on the excellence of the genus as a whole. This is *V. rhytidophyllum*. I know that this plant is much praised by Mr. Bean and other experts in shrubs, but I do not agree with their judgment in this case. It is an evergreen shrub with large umbel-like trusses of flowers and red fruits turning to black when they are ripe. I do not find fault with the habit, flowers or fruit, but only with the foliage. At the best the leaves are dowdy, unpleasantly wrinkled and of a dingy green. In the winter they have an ungainly habit of flopping straight down, as if the plant was in the sulks, while they are so easily torn and damaged that unless in exceptional circumstances they look moth eaten at all seasons of the year. Why this plant should be so lauded while others infinitely more valuable are passed over is beyond my comprehension.

A fine species that should be more often grown is *V. Henryi*. This is also an evergreen with narrow, pointed, dark shiny green leaves, which stand out well from the branches and so are an attraction throughout the year. I have several plants from 4-5ft. in height which are always a pleasure to look at. The flowers are pure white and, although small, are carried in large panicles. The fruit is oval and turns from red to black. It is said that it is sometimes a shy fruiter, but I find that the more exposed the plant is the more it fruits. On the east coast of Scotland my best fruiting plant is on the top of a dryish bank where it is in full sun and is in a draughty position. Next to it is a plant of *V. utile*, which I consider one of the best of the whole genus. It is more twiggy than *V. Henryi*, and the twigs shoot off at odd angles, making the growth most attractive. The leaves are not so long or so narrow as in *V. Henryi*, and are of a lighter shade of green, although just as glossy, while the undersurface is almost white. The white flowers are borne in May on well rounded trusses, while the buds have a pink tinge. The fruit is blue-black. *V. utile*, I find, is a shy seeder even in a plant 4ft. high.

Another useful viburnum is *V. Davidi*. This is an evergreen shrub always of low, compact growth, and is noticeable for its leaves, which are large, averaging about 4ins. in length and 2ins. in width. They are smooth and dark green in colour, and are conspicuous for the three large veins which run longitudinally. The flowers are tiny and, although carried in large heads, are uninteresting. When it fruits abundantly the blue fruits are attractive. One of the advantages of this plant is that it never gets out of hand, so its attractive form and foliage are useful in small borders or under a low window.

I have two plants, one on each side of the door outside a low greenhouse, and this appears to be an admirable position for them.

Apart from *V. Opulus* and *V. tomentosum* and their forms which are so well known, by far the best of the deciduous viburnums are *V. Carlesii* and *V. fragrans*. Although some people agree with me that *V. fragrans* is the better plant of the two, most gardeners so far seem to prefer *Carlesii*, the reason I think being that *V. fragrans* has to be some size before it flowers at all freely. *V. Carlesii* is a much smaller plant and appears never to exceed 4ft. in height. With me it is not such a good grower as *fragrans*, and is inclined to straggle,



THE DARK BLUE FRUITS OF VIBURNUM DAVIDI.

or rather it appears to have too few branches and so is open in habit. *Fragrans*, on the other hand, will grow into a large bush and is a very quick grower. Cuttings struck in 1919 are 5ft. in height, and one of the original plants which germinated in 1915-16 is over 7ft. and is 5ft. through. The great advantage to my mind of this plant is that it flowers from the New Year to the end of March. It has stood 16° of frost in my garden without turning a hair. There are two forms, pale pink and white, and there is nothing to choose between the two. This plant is extremely easy to propagate from cuttings. I have not yet fruited *fragrans*, nor have I ever heard of a good crop of fruit in this country; perhaps the reason is that there are no insects about at the time it flowers. Farrer spoke of it as very pleasant to eat.

I have a number of other species coming on, but they are not large enough to judge their position in this most useful genus. One which has not yet flowered with me is *V. hupehense*. From the description the fruits appear to be larger than most of them. It has, however, an attractive growth, more willowy than any other viburnum, at least in its young stage, and I should think is going to prove a very useful plant for our gardens. Another which seems to break into foliage very early in the year is *V. lobophyllum*. This has round red fruits, and belongs to a group which is rather confusing and of which the best known member is *V. diletatum*. E. H. M. C.



# ALPINE PLANTS INSIDE

AS MR. MARK PENWICK HAS SHOWN AT VINCENT SQUARE, THERE ARE NO PLANTS WHICH EXCEL SO MUCH AS ALPINES IN GIVING A FINE INDOOR SHOW IN A SMALL AREA.

AS it is impossible to deal exhaustively with the above subject in a note of this kind, it will be readily understood that even essentials must necessarily be comparatively brief, consequently rather incomplete, nevertheless an impartial survey may serve some useful purpose. Seeing that I have in mind two distinct kinds of alpine houses and two wholly different methods of achieving a

somewhat relative end, both are so widely variant that each must be dealt with separately, lest confusion arise. The theme then of my present discourse will be the most unnatural of the two extremes, that is the culture of mountain plants as specimens in either pots or pans.

The primary object of any alpine house should be the accommodation of such plants which for various reasons,

principally climatic, require the shelter such a structure affords in order that the fulness of beauty can be obtained without all sorts of perplexing problems and setbacks inseparable from the cultivation of many choice rock plants. Apart from these, a great number of others are much improved when treated as pot specimens and successfully grown in the confines of a cold house. Yet again, there are others that require to be frequently divided or otherwise propagated if they are to be of any decorative value. It may be added here that many plants of unsurpassing beauty in the rock garden are practically worthless for the purpose referred to. The essential point therefore is to concentrate on those kinds that are known to respond to this unnatural yet congenial treatment. The minute details of cultivation are numerous. Space only admits of a few of the most important being collectively and lightly touched upon.

It will have already been gathered that an alpine house should be light and airy, no artificial heat being required for raising the plants. Coddling at any time will prove disastrous both to the characteristic charm of foliage and sturdiness of flower. The work of re-potting as a general rule should be done after flowering is past, but there are many exceptions to this rule; forethought in these matters is always necessary. Perfect drainage must be provided in all cases. Watering, too, is one, if not the most, important item connected with good culture, yet it is too often looked upon lightly. Attention to all other matters will be of no avail if this be neglected or not carried out with proper care and understanding. The point is to give, and give freely, whenever water is required, but only when. Naturally, during autumn and winter, watering will become less frequent and should never be undertaken during frosty periods. Some varieties of the *Kabschia* group of saxifrages when allowed to become too dry in the above-mentioned seasons, often rush off during mild spells into premature growth when otherwise they would plump up for flower. Overhead waterings should be avoided generally, though at the proper moment an occasional spray refreshes most plants. This brings me to suitable soils.

Three different mixtures will suffice to cover the field in a general way, though in various cases and with some individual plants some modification of the following composts may be necessary. The unwary should be guided by the soil plants are growing in when purchased, remembering that after the first stages of growth potting soils must be less fine, yet quite free. Compost No. 1.—Three parts fibrous loam, one part half decayed leaf mould and half part sharp sand or grit. No. 2 is formed by adding to the above mixture fully half part lime rubble or limestone chips. No. 3 consists of



DIANTHUS MICROLEPIS, COMPACT IN GROWTH AND OF EASY CULTURE.

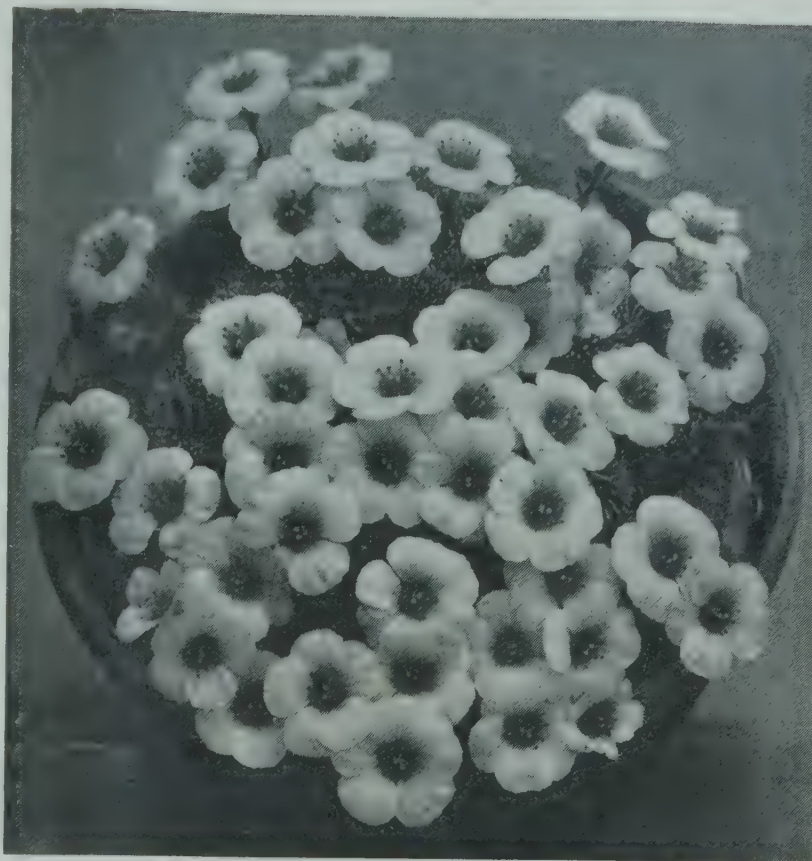


THE GRACEFUL SPIKES OF SAXIFRAGA GRISEBACHII, WISLEY VAR.



two parts peat and one part light loam and half part sand. To append a list of suitable plants is a perplexing problem, so numerous are they that one would almost hesitate before committing themselves to a short selection, but to exclude such a list would defeat the object uppermost in my mind. As catalogue numbers are impossible, fifty shall be the limit, that is if the Editor permits. By omitting mention other than here of many campanulas, primulas, bulbous plants and a whole host of others that can be grown on in cold frames or kept plunged outside until their prospective flowering season, when they can be brought in to swell the existing floral display or form drifts of colour during dull periods, I shall be able to include more of what might be appropriately termed permanent occupants.

List No. 1. — *Acantholimon venustum*, *Androsace cylindrica*\*, *A. helvetica*\*, *A. imbricata*\*, *Armeria cæspitosa*\*, *Asperula arcadiensis*, *Astragalus monspessulanus*, *Convolvulus nitida*, *Daphne rupestris*, *Dianthus microlepis*\*, *Draba dedeana*\* *Edraianthus Pumilio*, *Erodium cham-*



SAXIFRAGA FALDONSIDE COVERED WITH YELLOW FLOWERS.

*ædryoides*\*, *E. corsicum*, *Erinacea hispanica*, *Genista Villarsii*, *Geranium argenteum*, *Haberlea Ferdinandi* Coburgi, *H. virginialis*, *Lewisia Howellii*, *L. Tweedii*, *Morisia hypogæa*, *Pelargonium Endlicheriana*, *Phyteuma comosum*, *Primula*

*marginata*, *Saxifraga Boryi*\*, *S. cochlearis*\*, *S. Dr. Ramsey*\*, *S. Faldonside*\*, *S. Grisebachii* Wisley var., *S. hybrida* H. Marshall\*, *S. luteo-viridis*, *S. longifolia*\*, *S. lilacina*\*, *S. Myra*\*, *Sedum Palmeri*, *S. spatulifolium*\*, *Sempervivum arachnoideum*\*.

List No. 2. — *Chiogenes serpyllifolia*, *Conandron ramondioides*, *Diapensia lapponica*, *Ramondia serbica*, *Rhododendron chamæcistus*, *Schizocodon macrophylla*, *Shortia uniflora*, *S. uniflora grandiflora*.

With a few exceptions plants in List No. 1 thrive well in compost No. 2, and List No. 2 in compost No. 3. Plants marked with an asterisk are most suitable for pans while the remainder are for pots.

In conclusion let me add, a well appointed alpine house compares very favourably with other less simple and more expensive forms of indoor gardening. For this reason alone it should appeal especially to small amateurs who may not find it possible to satisfy their more cherished ambitions in the outdoor garden, and to whom the question of expense is important. J. T. H.

## BULB NOTES

### CROCUS VITELLINUS.

LAST autumn I was in the happy position of being able to exchange books with my good friend, Mr. E. A. Bowles. "Hardy Bulbs" went to Myddelton House and "Crocus and Colchicum" came to Whitewell Rectory. I had just got a few new crocuses from van Tubergen of Haarlem, including some vitellinus. This firm and our own Barr and Sons of London I look upon as crocus specialists. Imagine then my surprise when the newly received bulbs flowered to find that they did not tally with Mr. Bowles's description. I sent some to him to ask what they were. The reply came, "What a funny thing writing a book is. You have no sooner put down all you know than up jumps a new fact. That crocus of yours is vitellinus right enough. I nearly jumped out of my shoes when I saw one of this straw coloured form among mine the other day." He went on to say that his came in a newly collected lot from near Jerusalem and suggested that Tubergen got his from the same locality. It is a very charming soft straw colour and a great contrast to the usual orange. I am sure I could soon get as fond of crocuses as a mouse. By the way, I suppose the corms of the different species have each of them a flavour of their own. How else can one account for mice always going for Sieberi in a tray which was partitioned off into receptacles for

Imperati, susianus, Sieberi, biflorus and Tomasinianus? Every time it must have been Sieberi, for none of the others were touched.

### ERANTHIS TUBERGENI.

This newcomer received an award of merit at Vincent Square last year. I have now a few of my own and have been able to observe it at close quarters with the old Winter Aconite (*E. hyemalis*). It has much larger flowers and they are of a deeper yellow. Then, whereas *hyemalis* measured an inch across the top, *Tubergeni* was an inch and a quarter. Barr, who catalogues it, says it is a great advance on the old variety. So it is, if only it proves itself to be as good a doer and as unfastidious about soil and situation as my short trial suggests it will be.

### POETAZ (NARCISSUS) EARLY PERFECTION.

If my one season's experience is not wholly misleading, I struck oil when I bought some bulbs of this variety last autumn, knowing little more about it than its price. It was said to be early flowering, but as such a description is, after all, only relative, an ounce of experience is worth its weight in gold in determining its practical value. Potted on the same day and grown all along side by side with some of its poetaz relations and a pot of the old polyanthus narcissus — Mont Cenis — in a cool greenhouse, this newcomer was in flower nine

or ten days before any of them. This alone gives it a special value, which is certainly not diminished when its long, stiff stems and its numerous good-sized shapely flowers are taken into consideration. They remind me very much of Alsace in their colouring, but whereas that variety has not often more than three flowers on a stem, Early Perfection has from five to eight. I wish I had happened to have had some Alsace this year for comparison, as I believe it is the earliest of the original poetaz under glass. I think, however, in racing parlance, it would have been included in "the rest, nowhere." Mr. van Tubergen, from whom I had the bulbs, tells me he knows nothing about its origin except that it is a Dutch seedling which has made a great name for itself by its earliness. Its appearance suggests a polyanthus-narcissus as its mother and not a poet as was the case with all lucky Mr. R. A. van de Schoot's original varieties. I often think what a happy and profitable inspiration that was which came over my friend when he was one day walking in his bulb fields, "Why should I not try polyanthus pollen on a poeticus variety? I don't think this has ever been done." Old friend Time is continually adding to the original varieties and giving us a wider range of choice. Some of these, like Orange Blossom and Orange Cup, are very attractive. Mr. Clarence Elliott, when



he is not trying to convert sinks and pig troughs turns his attention to the making of big rock gardens. To his presence at Shrewsbury for this purpose I owe his surprise visit last year, when I had a few nice ones in flower. They were new to him, but he showed his appreciation by begging for a few blooms to take back to his wife who was with him there for a few weeks while the work was in progress. Why this aside? Because the opinion of a non-specialist who is accustomed to go about and see things, is always valuable. These new poetaz might well be more widely known and grown.

#### SHORT STEMS ON EARLY TULIPS IN POTS.

The Editor would be doing a whole crowd of us poor people who have to have greenhouses which can never boast a temperature of more than about, say, 50° F., and who have no means of heavy shading growing bulbs, if he could get someone who has himself done the trick to tell us how we can get decent stems on early-flowering tulips in the third and fourth weeks in January or even in early February. I am disposed to think it cannot be done. Our efforts here are miserable failures in almost every case. There are one or two exceptions. The white Diana is one. I have never grown it until this winter; so it was a pleasant surprise to have a decent pot of it in flower on February 5th. What about the others? With sufficient heat and facilities for very heavy shading and some bottom heat wonders can be worked and the Editor makes our mouths water when he tells us how he buys bunches of nice tulips in January with stems long enough to "cut an inch or so off"—but can such stems be produced in any

sort of a greenhouse short of a stove? I am watching my two or three "Mendel" varieties with sanguine expectancy.

#### POTTING FREESIAS AND PLUNGING.

I read an article in a contemporary recently in which the writer advocated plunging the pots, when the bulbs were first planted. My good friend Mr. G. H. Dalrymple, who has the eye of a hawk for anything that appears in print on the subject of freesias, has taken the writer to task this week. He states he has grown thousands and never has plunged one. So have I, and I, too, have never plunged one. There is no necessity whatever for such a practice. It must be very bothering if it is attempted, as, in favourable circumstances, the fresh growth appears in a very short time and a perpetual series of scratchings down to the top of the pots would have to take place to know when they must be taken out. It is just as well this should be said now when the freesia season is in full swing. Mine began far too early this year. The house which we always knew was our warmest and where only a few odd pots used to go, was three-quarters filled with freesias this year. It must be warmer than we thought. The thermometer has probably underdone the temperature in the past. At all events the whole of those in this house have suffered inasmuch as the stems were weaker and more sappy than they ought to be, and the flowers did not last as long as they usually do when cut. Even that fine Dutch variety Apotheose displayed a weakness in its usually stout stiff stems. I feel pretty sure that all coloured varieties are all the better the cooler they are grown. As these are increasing in favour

with flower lovers I feel this fact ought to be known. They do not bear, as far as my experience goes, the same treatment as the old *refracta alba*.

#### FREESIAS FROM SEED.

A big firm has taken the bull by its horns and given a prominent place in its 1925 Seed Catalogue to freesias from seed. Messrs. James Carter and Co. have a coloured plate to show their customers the sort of flowers they may expect to get from sowing the seed they offer. It is not in the least exaggerated. Given a first rate strain, good results are as certain to follow as night follows day. The point that is troubling me at present is the time when we may expect to see them bloom. Freesias can be flowered in seven or eight months from the time the seed is sown, but whether this will be found to be a practical working proposition I cannot say. I have my doubts. My own experience points to January or February as being the most promising time to sow if quick results are required, but longer experience and more information are needed to settle the question.

#### DWARF IRISES IN POTS.

For those on the look-out for something rather out of the common to grow in a very cool house, may I suggest a trial of these four little fellows, *Histrio*, *Vartani*, *Sindpers* and *reticulata*. They can be had in full bloom at the end, or even the middle, of January in a greenhouse just one remove from a cold house; and if they are grown in small, round pans or low pots, make a welcome change from the usual run of early forced bulbs. *Histrio*, *Vartani* and *Sindpers* have pale blue or grey flowers, and *reticulata* rich purple. JOSEPH JACOB.

## THE USES OF GARDEN NETTING

AT this season of the year netting can perhaps be described as one of the most useful of all garden sundries. To many gardeners the use of this valuable commodity is confined almost entirely as a means of protection from the depredations of birds among the young and succulent seedlings now appearing in most kitchen gardens. There can be no doubt that when stretched over suitable supports this forms an ideal method of safeguarding growing plants and ensuring successful crops at the appointed time; while its value as a protection for growing fruit from birds, wasps, etc., will be readily admitted. Take a walk through any fruit garden during the early part of spring, and one immediately notices the tremendous fascination which young opening fruit-buds have for most of the feathered tribe, although it is only fair to the birds to state that the fruit buds are usually destroyed by birds in pursuit of insects. While it would not be practicable to enclose every tree in a casing of netting, the majority of dwarf and wall trees can be very easily and satisfactorily protected from marauders. If a fine-meshed netting can be hung on supports fixed either to the wall or round the tree in such a manner that it hangs

quite clear of the tree itself, it will in no way damage the bloom or interfere with the growth. A protector of this nature will not only render the tree immune from birds, but will also serve to ward off frost and act as a decided break to cold, rough winds. Visitors to recent R.H.S. shows will have noticed the exhibits of both Major C. Walker of Brecon and Messrs. House and Garden Sundries, each of which prominently featured various methods of protection. Major Walker's appliances are solely designed to render growing fruit immune from birds, frost, cold winds, wasps, etc. They consist principally of a fine-meshed netting which is supplied complete with the necessary supports for simple fixing. They have the great advantage of being portable, and can be erected in a few moments by one man. The specialties of Messrs. House and Garden Sundries consist mainly of stout wire supports and frames, manufactured in various sizes, for protecting seed-beds, plants or wall trees. The supports are simply placed in position on the wall or in the ground, and the netting, when fixed over them, forms a complete cage. These contrivances are extremely simple to erect, and when finished with can be taken down in a few moments.

For the training of peas, beans, sweet peas, etc., netting is also extremely useful, inasmuch as it can be taken down and stored in a small space when the plants have finished yielding. For this purpose it will usually be found that a netting of larger mesh and stronger manufacture will be required than is used in the foregoing. An ideal netting for this purpose is that known as the "Simplicitas" brand. It is made from a special strong cotton cord and is for superior to the majority of ordinary nettings on the market, which are usually made from hemp. The writer has had a quantity in regular use for the past five years and it is still as serviceable as when first used. This is all the more surprising when one considers that it stood the test of two winters in the open without shelter of any kind from the weather. It can also be obtained in cylindrical lengths of various diameters, and in this form is particularly useful for supporting clumps of herbaceous plants or for training circular clumps of sweet peas, etc.

Old fishing nets are seldom, if ever, satisfactory, and usually give more trouble in fixing and repairing than they are worth. The additional expenditure of a few extra shillings in this respect is



usually well worth while. An interesting innovation of recent years is the creation of a string netting department at St. Dunstan's, where many of the blinded

ex-soldiers and sailors have been trained in the manufacture of all kinds of nets. The industry has become so well established that at the present time it gives

employment to about five hundred of these men in their own homes, and readers might well bear this in mind when ordering nets for the coming season. J. C.

## EASTER FLOWERS AT VINCENT SQUARE

**Q**UITE a gay and festive scene met the eye on entering the Royal Horticultural Society's Hall at Vincent Square on the occasion of the usual fortnightly meeting on April 7th and 8th last. The special exhibits of odontoglossums probably took the premier place; while roses, narcissi, carnations, alpine and stove plants and shrubs all added their quota to the welcome display of colour and bloom. Cinerarias and primulas were also represented, massed in groups forming a many-coloured carpet. The daffodil season is a late one this year, and many exhibits are being reserved for the Narcissus Show on April 15th and 16th. Fruit in the shape of home-grown apples in season was in the capable hands of Messrs. Bunyard of

An attractive display of hybrid freesias was staged by Mr. G. H. Dalrymple, the raiser of the much admired *Freesia Wistaria*. The colours, especially of the seedlings, were very varied: some were pinkish tinged with yellow and orange, others cerise, mauve or gold. The self colours in many cases were more effective than the shaded; the yellows particularly were extremely beautiful. All of them are excellent for decoration and easy to arrange artistically. Such varieties as Bluebeard and Mouette or *Wistaria* and *Treasure* form a pleasant contrast. Mr. Dalrymple was showing *Goldfinch*, a beautiful deep yellow with a golden throat; and *Treasure*, a pale yellow variety on thin wiry stems. *Bluebeard* is a bluish mauve *freesia*, and *Mouette* is pale pink in colour.

and *Diana* were also exhibited. Messrs. Stuart Low and Co. were showing a charming sulphur yellow rose called *Roselandia*, raised by Mr. Walter Stevens. Most of the roses exhibited by Messrs. Allens were grown in pots and belonged to the *Wichuraiana* or the dwarf polyantha class. Some of these are ideal for forcing and are very decorative in a greenhouse, especially the varieties Messrs. Allens were showing. Of the dwarf polyantha type, *Orange King* is a dainty little specimen with a mass of tiny button-like flowers of quite a new shade of bright orange-salmon. *La Reine Elizabeth*, *Ellen Poulsen* and *Mrs. William Cutbush* were other examples. *Lady Gay* was undoubtedly the best *Wichuraiana* shown. The large pyramidal trusses of rosy pink flowers borne on long



(Left) PALE MAUVE FLOWERS OF PRIMULA BARBARA BAKER. (Right) PRIMULA MALACOIDES, GOLDEN EYE, OF FLORIFEROUS HABIT.

Maidstone. The proximity of Easter no doubt accounted to some extent for the small attendance.

One of the main exhibits of primulas was that put up by the Mental Hospital, Napsbury, St. Albans (gardener, Mr. W. J. Jennings). The exhibit consisted of hybrids of *Primula obconica* in all shades of colour. The plants were all in excellent condition, with a plentiful supply of bloom, and showed the results of careful cultivation. Pinks, pale and deep lilacs, light and dark blues and whites were all represented in flowers varying in size from  $\frac{3}{4}$  in. to 1 $\frac{1}{2}$  ins. in diameter. The flowering stems carried the flowers well, and varied in height in the different varieties from 9 ins. to 18 ins. These hybrids are excellent subjects for providing a good display of colour in the greenhouse, and should find more favour in the future.

Messrs. Hillier staged an interesting collection of dwarf rhododendrons, collected by Forrest and Kingdon Ward in China and raised by Lord Headfort. Among them were the attractive pale pinks of *R. racemosum* and its relations, and *F 20488 R. orthocladum*, with tight heads of soft lilac-blue flowers. It is such dwarfs or semi-dwarfs as these that will prove so invaluable in our gardens when they become common enough to sell at a price cheap enough for all pockets.

Some of the varieties were very sweetly scented, others possessed only a faint trace of the true *freesia* fragrance.

Everyone loves the rose, whatever time of year it may be, and the exhibits of roses at Vincent Square this week had many admirers. Nearly every passer-by stopped to enjoy their fragrance and beauty, especially of those on the stand of Mr. Elisha Hicks. His roses were in excellent condition, vigorous and robust in growth. The colours also were good. The variety *Mrs. Elisha Hicks* proclaimed itself by its sweet scent, which was effective some distance away. From a point of view of colour and form this rose is somewhat over-rated. *Paul's Scarlet Climber* made a vivid patch of colour, while the beautiful variety *Clovelly* with its rich salmon shaded rose flowers, and such others as *Betty Uprichard*, *Mme. E. Herriot*, *Lady Hillingdon* and *Madame Butterfly* adorned the stand. *Lady Hillingdon* is of a shade which is hard to beat.

Messrs. Benjamin R. Cant and Sons were showing a splendid exhibit of *Padre*; the blooms were of good size and glowing in colour. This firm was also showing *Sovereign*, which is a good yellow bedding rose and is a variety which meets with great favour, as it is not liable to that dreaded disease, mildew. *Phoebe*, *Autumn Tints*

stems were very effective, which could not be said of *White Dorothy*. This particular specimen could hardly be called a pure white *Wichuraiana*, and is a poor thing at the best of times, with naught else but floriferousness to recommend it. Among the hybrid teas, *Maud Cumming*, *Betty Uprichard*, *Lord Charlemont* and *Hadley* were most noticeable.

As new narcissi are constantly being raised, seedlings good and indifferent are brought before the notice of the public, and one wonders which of them will become the proud possessors of a name and in time a place among the general collection of the average gardener. Some should be passed by, but others are an improvement on the existing varieties, while a few are decided breaks and have certain qualities lacking in the older kinds. The allotment of awards of merit is a strange business; it is difficult to understand why certain varieties are received favourably and others are considered unworthy of recognition. Some of the seedlings exhibited by both Messrs. Barr and Sons and Messrs. R. H. Bath and Sons were equal if not superior to those varieties which received awards of merit this week. Perhaps when these seedlings are put up for an award of merit the narcissus world will be taken by storm. The great variety in form and



colour, the vivid orange cups of the incomparabilis and Barrii seedlings, and the translucency of some of the flowers, called forth exclamations of surprise from many an onlooker. In some of the new seedling trumpet narcissi there is a tendency for the trumpet to be too large in proportion to the perianth, making the flower unbalanced; but no such criticism could be passed on a good variety like Golden Sunrise, which was exhibited by Messrs. R. H. Bath and Sons. The flowers are of great size, a uniform rich gold, and the open trumpet is elegantly frilled. This variety surpasses King Alfred, a similar trumpet daffodil. Bath's Flame was another attractive narcissus shown; it has a vivid orange cup and thin twisted segments. Some good varieties among the many others were Bernardino, Gaiety, Crystal Queen and Golden Dustman.

Wandering up and down before the stand of Messrs. Barr and Sons, one was astonished by the beauty and variety of the modern narcissus, and it was a bewildering task to select a few from among them. Superlatives could rightly be used to describe every one, and yet to be fully appreciated they should be seen. It is surprising that some people keep to the same old varieties when, as could be seen at the Hall this week, there are many others infinitely superior. Cræsus, a fine incomparabilis with a wide orange-red crown; Jasper, Nysa and Sunny Lass, typical of the Barri section, were exhibited by Messrs. Barr and Sons. Pax, St. Olaf, Orange Sceptre, Tamora and Lord Kitchener were various other excellent varieties.

Anemones seemed to occupy most space among the rock plants. A. blanda was present in all its forms, of which Scythica, dead white within and steel blue without, is the most attractive. Maurice Prichard showed a good purple form of A. nemorosa and the eccentric variety of A. nemorosa bracteata, a Jack-in-the-green flower with a green ruff and a double row of tousled white petals. Messrs. Reuthe showed A. vernalis, a flower of the melting snow, with a deep cup of ivory white enclosing a mass of soft yellow stamens, the outer surface of the petals washed with greyish blue and covered with silky hairs. A. ranunculoides, whose bright buttercup yellow is a break from the family tradition, was shown by Mr. Frederick Wood of Ashted, who also exhibited a group of Fritillaria pyrenaica, a flower that has the sinister attraction of deliberate ugliness. The heavy waxen bells, greenish yellow inside and dingy purple, heavily bloomed, without, are set off by the pale glaucous foliage and exhale a faint corpse-like odour. They made an excellent foil to the innocent forget-me-not blue of Mertensia virginiana. Clarence Elliott and Co. gained an award of merit for the hybrid Primula pubescens Barbara Barker of their own raising (Zuleika  $\times$  Linda Pope), a large pale mauve flower with regular, overlapping petals and a white eye; and another award for Rhodothamnus chamæcistus, which is very nearly a rhododendron, but tolerates lime, and is, therefore, a very valuable little shrub, for it produces its flat, pale pink *Alpenrosen* very freely and is still a decorative little bush when out of flower. Messrs. Waterer showed some vigorous

plants of Epigæa repens, that powerfully fragrant little shrub that makes wide mats in shady woods of North America, but seldom, unfortunately, shows the same activity in this country. Another very attractive North American plant, Calypso borealis, a fantastic little spider orchid with twirled wings of purplish pink and labellum blotched like an odontoglossum, was shown by Messrs. Reuthe.

Other exhibitors were:

*Carnations*.—Messrs. Allwood Brothers and C. Engelmann.

*Cinerarias*.—Messrs. Sutton and Sons.

*Forced Shrubs*.—Messrs. L. R. Russell and Stuart Low and Co.

*Fruit*.—Messrs. Bunyard and Co.

*Orchids*.—Messrs. J. and A. McBean, Charlesworth and Co., R. Gerrish, H. T. Pitt, and Sanders and Co.

*Polyanthus*.—Messrs. John and A. H. Crook, K. and E. Hopkins, G. A. Miller and Mrs. Barnard.

*Rhododendrons*.—Messrs. Hiller and Sons and G. Reuthe.

*Shrubs and Alpines*.—Messrs. Bakers; J. Cheal and Son, Limited; William Cutbush; Maxwell and Beale; Carter Page; W. H. Rogers and Son, Limited; and Skelton and Kirby.

*St. Brigid Anemones*.—Messrs. Reamsbottom and Co.

*Topiary*.—Mr. John Klinkert.

*Tulips*.—Messrs. Carter and Co.

*Violets*.—Mr. Baldwin Pinney.

## NEW AND RARE PLANTS.

PRIMULA  $\times$  BARBARA BARKER. — A dainty little hybrid forming a neat, almost a rosette, cushion. For its size it appears very floriferous, carrying ten to twelve flowers. In colour the flowers are pale lilac mauve with a white eye. The flower is very shapely and compact, with the petals close-fitting and overlapping. They vary from  $\frac{1}{2}$  in. to  $\frac{3}{4}$  in. across. This variety should prove of great value either in the rock garden or as a pot plant. Award of merit. Shown by Mr. Clarence Elliott, Stevenage.

RHODOTHAMNUS CHAMÆCISTUS. — One of the most beautiful natives of the eastern and southern Alps, clothing the limestone screes with tussocks of dense tiny shoots covered with their small fringed and hairy leaves of bright green. The plant exhibited showed these characteristics very well indeed, and in addition carried the delicate saucer-shaped flowers of a pure pink colour. Each is carried on a single delicate stem. It is one of the most beautiful inmates of the rock garden, forming cushions of great charm. Award of merit. Shown by Mr. Clarence Elliott.

PRIMULA MALACOIDES GOLDEN EYE. — An excellent hybrid of the type species, with a dainty, almost feathery, appearance. It is of compact habit and very floriferous, bearing clusters of white flowers with a pretty golden yellow eye. The petals are rather prettily cut. The flowering stems vary in height from 6 ins. to 9 ins., and can scarcely be seen when clothed in their mass of flowers, which contrast well with the light green of the foliage. Award of merit. Shown by Messrs. J. Carter and Co., Raynes Park.

CARNATION SHOT SILK. — Blooms of a perfect shape and colour of a twin shade of light and dull red which makes an excellent blend, fully justifying the varietal name. The calyx is firm and shows no sign of bursting in the expanded flower. The petals are regular and prettily crisped. The flowers, which are large—2-3 ins. across—are carried well on the rather drooping stems. Award of merit. Shown by Messrs. Allwood Brothers. Haywards Heath.

LACHENALIA GLAUCINA. — A rather dainty species carrying many small pale green to yellowish flowers on each flowering stem, which varies from 6 ins. to 9 ins. in height. The bells are carried more or less rigidly on the stem, pointing outwards and upright. Award of merit. Shown by the Rev. Joseph Jacob, Whitewell Rectory, Salop.

NARCISSUS PILGRIMAGE. — A fine yellow incomparabilis variety bearing perfect flowers of a pure soft delicate yellow colour. The trumpet is prettily crisped at its outer edges. The blooms are carried well on the long erect stems. Award of merit. Shown by Herbert Chapman, Limited.

NARCISSUS IRENE COPELAND. — This variety carries double flowers of a pale whitish yellow colour, almost transparent. Some of the petals are pale yellow, while others are white. The pale yellow petals are said to become white when exposed to sunshine. It is not a variety which impresses one with its great beauty, the reason probably being the fact that it possesses a double flower, which nowadays is not looked on so favourably as single-flowered varieties. The blooms are well presented on long erect stems. Award of merit. Shown by W. F. Copeland, West Shirley, Southampton.

## ORCHIDS.

ODONTOGLOSSUM CLODAGH (Lakinæ  $\times$  Nathaniel). — A showy hybrid with an erect spike of six flowers, all the segments heavily blotched with chocolate-red, the broad labellum displaying more of the white ground than the other segments. From Mr. R. Gerrish, Milford Manor, Salisbury (gardener, Mr. Sorrell). Award of merit.

ODONTOGLOSSUM CORDOBA (eximium  $\times$  Doris). — One of the best varieties of this hybrid, which was first recorded by Dr. Lacroze in 1918. The spike bore eleven flowers, compactly arranged, of almost solid reddish blotching, the labellum having a broad white margin. From Mr. R. Gerrish, Milford Manor, Salisbury. Award of merit.

CYMBIDIUM VESTA VAR. THELMA (Alexander  $\times$  insigne). — The arching spike of this hybrid carried nine large flowers, all the segments broadly developed, and of a blush-pink tint, the labellum lined and dotted with crimson, the column deep rose colour. From Messrs. J. and A. McBean, Cooksbridge, Sussex. Award of merit.

Gold medals were awarded to Messrs. J. and A. McBean, Cooksbridge, Sussex, for an extensive group of various species and hybrids; and to Mr. R. Gerrish, Milford Manor, Salisbury, for a well arranged exhibit of choice species and hybrids, the excellent cultivation of which was rewarded by a silver Lindley medal being given to the gardener, Mr. W. Sorrell.

## SERVICE FOR READERS

Though so many subjects are dealt with in each issue of THE GARDEN, it must constantly happen that readers seek information which is not immediately available. In such circumstances they should make use of our new Service Department. Through its medium each reader's own particular enquiry can be dealt with. No matter what the question is, whether advice is sought as to—

RESTOCKING A GARDEN, COLOUR SCHEMES FOR GARDENS, THE BEST PLANTS FOR CERTAIN SITUATIONS, WHERE TO OBTAIN NEW AND RARE PLANTS, INSECT PESTS, NAMING OF PLANTS, AND THE HUNDRED AND ONE OTHER DETAILS RELATING TO THE GARDEN—

there is always information available from a staff of expert contributors and consultants; and there is no charge for this. It is one of the additional means of Service which THE GARDEN is glad to render to its readers.

Also, there is the further convenience which the Service Department affords of supplying readers with data about anything that is advertised in the pages of the paper. Thus, on receipt of an enquiry, particulars will be sent of, say, half a dozen things about which the reader seeks information. The only stipulation is that a stamped addressed envelope shall be sent with the enquiry.

All communications should be addressed to the Service Department, THE GARDEN, 20, Tavistock Street, Covent Garden, London, W.C.2.



# CORRESPONDENCE

## MALUS THEIFERA.

SIR,—On page 61 of THE GARDEN issued January 31st appears an interesting account of *Malus theifera* from the pen of my friend, Charles Leray, telling of the behaviour of this new crab apple in Europe. From the illustration accompanying the article one gets the impression that flowers and foliage are expanded at the same time. If this is its normal behaviour in Europe, then I fear the plant is less ornamental than in a wild condition in China. The accompanying photograph shows how this fine crab apple

ways, and have found it very useful indeed. I think the following method is the best. Crush the alum to as fine a powder as possible. (If it can be obtained in a really fine powdered condition, further crushing will not be necessary, but the "powdered" alum I have been able to purchase has generally been in a rather lumpy condition), and sprinkle it over the border after dark when the slugs are on the move, choosing a mild night for the purpose. In order to sprinkle the powder evenly, a tin should be used, having the lid perforated with small holes not more

the open, in sand and leaf-mould, but sheltered from the north and west by walls and getting a fair share of southerly sunshine. All six bulbs threw up flowering spikes in due course, and the first flower was fully expanded on January 22nd. Since then the rest have followed suit, each stem bearing two lovely azure and gold blossoms. But, from what I am told, unless we get a much warmer summer in 1925 than we had in 1924, the probabilities are that next year the percentage of flowers will be much smaller. Also, I must admit that up to the present



MALUS THEIFERA IN THE ARNOLD ARBORETUM

flourishes in the Arnold Arboretum, yet the picture might well have been taken of the tree on its native heath, so closely does it simulate the habit and character of the plant in a wild state. Some of the branches are from 12ft. to 15ft. long, and from tip to base are thickly strung with blossoms. It fruits in equal profusion. The combined effort, however, has an exhausting effect, and the tree is at its best in alternate years. Unlike many crab apples, *M. theifera* comes true from seed.—E. H. WILSON.

## ALUM FOR SLUGS.

SIR,—May I please say a few words regarding the alum treatment for killing slugs? Since Mr. Richardson first wrote with reference to the use of alum, I have tried it in several

than 3-32in. in diameter. When sprinkling the powder some sort of light will be found useful in order that it may be seen how the powder is being spread. A thin sprinkling is all that is necessary, and the number of dead slugs which will be found on a visit to the border in daylight will furnish the necessary evidence of the efficacy of the treatment.—H. R. C., *Wimbledon*.

## IRIS TINGITANA.

SIR,—In your issue of February 21st, "B. K. G." asks for the experiences of your readers in flowering *Iris Tingitana*. So far I have had no difficulty with it. Last autumn as an experiment I sent for six bulbs from Messrs. Barr, and planted them the first week in October. They are planted in

we have not had any frost or really cold weather.—E. F. C., *Guernsey*.

## IRIS RETICULATA.

SIR,—I have read with great interest Mr. Dykes' delightful article on "Some Garden Iris," but am much surprised at his omission of the lovely *Iris reticulata* from his collection. It is somewhat fanciful as to the soil it prefers, but, given a light stony soil, it flourishes and increases in an extraordinary way, throwing up its fragrant royal purple and gold blossoms in February regardless of weather. It should be lifted every alternate year in late June, when the foliage has died off yellow, and replanted in August in well dug soil. Many people think it is too dainty in its tastes to appreciate fertilisers, but,



short of planting in raw farmyard manure, nothing comes amiss to it. Soot, lime, mortar rubbish, superphosphate, fish manure, well rotted stable manure, it eats them all with the greatest avidity and the best results. Care must be taken, however, to give nourishment little and often. The blossoms open in water when gathered in bud, and last over a week in good condition. On the whole it is the showiest and at the same time the most uncommon flower to be seen in the garden at this early season, and, where it thrives, of the easiest cultivation. It is astonishing it is so little grown.—AN IRIS LOVER.

#### DIGGING AND TRENCHING.

SIR,—The writings of Mr. E. Beckett on anything pertaining to the cultivation of vegetables and the treatment of the soil are read with avidity by thousands of gardeners and allotment-holders. He is also often quoted at meetings of the above. The question at issue on digging and trenching, especially that relating to the bringing of the subsoil to the surface, is frequently debated, and from my own experience there are numbers of cultivators who hold the opinions of "J. H."

Personally, I always advocate great care in trenching, and for safety's sake to keep the subsoil in its place until it gradually becomes in good condition, and then as gradually bring it to the surface. The reason for this is that instances have occurred where the subsoil, having been brought to the surface, nothing would grow in it, at least for a season or two. It is here that I feel it would be good if Mr. Beckett would shed further light on the subject. For instance, what treatment would he give the top spit before cropping, the first season after trenching?

One would also be much interested to learn Mr. Beckett's experience during the first season or two after he commenced his method.

I should only advocate the bringing to the top of the lower spit when plenty of material is assured for working into it, more especially if the soil is of a stiff nature; in this case, if ample supplies of stable manure, lime rubble, road grit, burnt refuse from the rubbish heap, leaf-mould and so on are available, and the work can be carried out in late summer or early autumn, and the trenches left ridged, the soil will then be in good condition for cropping during the following spring, especially if it receives plenty of working previously.—G. H. H.

SIR,—I have just read Mr. Beckett's letter in reply to mine *re double* digging or trenching of heavy clay soils. I draw attention to *double* digging, as I did not in fact mention digging simply.

I trust Mr. Beckett does not think for a moment that I, or anyone else for that matter, doubt his statements as to the results he has obtained by his method of treating heavy land, but what suits one class of soil and locality may and does often fail in another.

My experience extends over nearly as many years as Mr. Beckett's, and it has been my fortune, good or bad, to be mostly on clay, and I have proved by experience that it is a mistake to bring sour, poor subsoil to the surface and expect to grow good crops on it, the first year at any rate.

In the West of Scotland during the past two years, gardeners have had to be content with the *good* ameliorating influence of rain alone, which, as anyone knows, does not do much in the way of breaking up clay even when exposed on the surface.

If one could depend on a week's good hard frost, things might be different, or even a reasonable spell of dry weather; but unless there is unlimited supply of labour, and good

opening material to apply to the surface, I find it best to leave the subsoil below; but by all means break it up every year, if possible.

One can hardly accept the fine specimens of vegetables shown by Mr. Beckett as ordinarily grown garden crops. At least ten times the labour must be spent on primary preparation and subsequent attention that any ordinary gardener can find time for: hence my only reason for writing.

Should opportunity offer, I will be most happy to avail myself of the kind invitation to Aldenham, not that I doubt in the least the excellence of the results or the nature of the soil, but for the pleasure of making the acquaintance of such a noted grower of vegetables.

But I still warn anyone to be careful in going too far in bringing barren soil to the surface in the hopes that nature alone may work a miracle and turn it into something better.—J. H.

#### PLANTING THE WATER GARDEN.

SIR,—May I correct an error that occurs in my article on page 158 of the issue of March 21st, due, I am afraid, to faulty punctuation in the typing of the MS. The words, "The best of them is a wonderful and richly coloured violet. This is one of the species that only gives of its best under moist conditions of the soil," refers to Iris Delavayi and not to I. Wilsoni.

True, Iris Wilsoni also does best in moist soil, but it is yellow, not violet, and, except that the conditions of cultivation are the same and that they are said to cross freely, the two have little in common. Delavayi grows twice the height of Wilsoni and is by far the better plant of the two.—GEO. DILLISTONE.

#### BLACK CURRANTS.

SIR,—I have been much interested in the notes from your contributor, Mr. G. F. Copley, in the issue of THE GARDEN for March 7th on the subject of black currants. I am surprised that he does not mention that super-excellent variety—when it is obtained true to name—the Baldwin. Boskoop will beat it for weight of crop about one year in eight, at all other times the Baldwin is, in my opinion, far and away the best variety in cultivation. The berry is large, the clusters long and it fruits right up to the wood. It is of very strong flavour and therefore valuable for preserving, particularly to the professional jam-maker, and its strong skin enables it to travel long distances and arrive in good condition. Many tons have gone from this neighbourhood (Herefordshire) to Scotland.

One of the secrets of growing this variety to perfection is to give the bushes a little protection during the blooming period. It is almost the first sort to blossom, and the biting winds that are so often prevalent in March have, I think, more to do with a failure than is generally realised by gardeners. This precaution is, of course, impossible on a commercial scale, though simple in a garden, but even so we have scrapped all other sorts here in favour of Baldwin. There is another point that is not generally made enough of by gardeners, and that is the value of strain. Just as in the breeding of livestock, so in the planting of black currants, and particularly of Baldwins, strain is important, and I would urge upon all intending growers this advice: "Be careful where you get your stock and that it is sound and well grown. Get a guarantee of truth to name, and you will not regret your pains." An example of the value of strain and the way it is appreciated by the professional fruit-grower as distinct from the garden grower is shown by the fact that we have sold close on a quarter of a million Baldwin

bushes of our own strain in the last three or four years, and have sent them to districts varying from the north of Scotland to the south of England and from Wales to Norfolk at prices very nearly three times those at which at least three of the varieties quoted by your correspondent were freely offered.—A. H., *Ledbury*.

#### CONCERNING CYCLAMENS.

SIR,—Is it not rather remarkable that firms specialising in cyclamens do not pay more attention to the scented strain of this plant? That such a strain exists—but is not general—was amply proved by THE GARDEN in an article three or four years ago when it described a noted scented collection of a private owner. I believe Messrs. Barr offered, later, seed from this source, but in their catalogue for this year no such mention is still made. Messrs. Barr, however, make the statement in their seed catalogue that the cyclamen is a fragrant greenhouse bulb. This is a much too generous eulogy, for, speaking generally there is no more sweet smell attaching to a cyclamen flower than there is to the corn from which it springs. So far as my experience and observations have gone, a fragrant cyclamen plant is a rarity. You may go several years and not get one scented plant from a sowing of seedlings or a purchased collection of young plants. On the other hand, one may get a pleasant surprise from any given sowing. I had such three years ago, and the fragrance still persists in the latest progeny. There is no mistaking this sweet attribute, and anyone can easily detect the plant so possessed among a batch of other cyclamen in flower. Not long ago two plants were put in the drawing-room of the manse here—one a scented seedling specimen, the other an ordinary or non-scented plant. The former was soon picked out and commented on, proving that the quality claimed was quite distinct and noticeable. May I mention another instance? Some time ago, looking round a good class garden, I was shown a most sweet-smelling white cyclamen plant, the only such example out of half an ordinary span-roofed house collection. The then head-gardener said he had never possessed the like before. The colour of the flower here is a soft rosy pink. I know of no firm even mentioning fragrance in connection with cyclamen other than the above reference given. Can it be the acquisition of sweetness in this flower is not considered to be, by the experts, a step forward in the all-round perfecting of this plant? If not, why not?—C. TURNER, *Amptill Park*.

#### NATIVE PLANTS.

SIR,—You have, Mr. Editor, done well to draw attention to the collection of native plants. I quite agree that many native plants are difficult to establish in gardens. I never try to transplant wild plants found growing on our hills and in the dells, because, from experience, they proved to be very stubborn to establish, in fact, nine times out of ten they absolutely refused to grow. The method which I have found most successful, and give for what it is worth, is to leave the parent plants growing, and, instead, take off a few cuttings. Cuttings seldom fail if treated properly in a cold frame. Strip off a few shoots, tie a little damp moss round them, in this way the shoots will remain fresh until time will permit to place them in a frame. A few years ago I came across a lovely batch of white heather, in full bloom, on one of the hills in Banffshire. Afraid to lift a plant I stripped off two dozen young shoots, took them home and placed them in a cold frame among peat and sand, where they took root and formed lovely plants. From these plants many sprays of white heather have been sent to friends abroad.—GEO. STUART, *Edinburgh*.



# SIMPLE GARDENING

## PLANTING GLADIOLI IN APRIL.

THE corms may be planted from early in March to the middle or end of April to secure a long season of resultant flowers. In heavy soils early planting is not advisable, as the corms do not begin nor continue to grow well in such ground. To overcome the difficulty the corms are planted in pots and the growing plants are duly planted out in prepared ground. In nearly all kinds of soil the corms may be planted in April, and it is from these corms that the best spikes are available for shows held during August. Some varieties are earlier-flowering than others, and, of course, these should be planted last. If we take the middle of August as a date when, approximately, the flowers are required for exhibition, such varieties as Pink Perfection, Princeps, Flora, War, should be planted first. A few days later plant Baron Hulot, Empress of India, l'Immaculée, Maréchal Foch, Red Emperor, Yellow Hammer and White Giant. Ten days after the first planting, plant Golden West, Halley, Prince of Wales, America and Panama. The earliest or main spikes will be available first, and from a few dozen corms spikes may be cut till as late as early September.

Gladioli are not really difficult to grow, but they respond to good treatment, producing extra fine spikes and individual flowers. The corms should be planted 3-4 ins. deep, each one surrounded by a little coarse sand, and 1 ft. apart. Manures used should not touch the corms. Surface mulches are beneficial in hot weather.

## PRIMULAS FOR THE GREENHOUSE.

There are many very beautiful families of primulas suitable for furnishing the greenhouse and conservatory, such as *kewensis*, fine for mid-winter blooming; *obconica grandiflora*, also for mid-winter, *malacoides*, for late winter and spring; but I am now referring mainly to the raising of plants of *Primula sinensis*, as these require rather more care and skill to grow really well. There should be two sowings, one now and a second about the third week in May, not later than the first in June. I recommend pots or pans in which to sow seeds, rather than boxes. Good loam and leaf-soil in equal proportions with a free sprinkling of old mortar rubble makes a suitable compost. Fine sand should not be used, only very coarse, dry sand. Drainage must be efficient, as any stagnant moisture would be harmful to the seedlings. The soil in the pan should be watered one hour before the seeds are sown, cover the seeds with a very thin layer of soil, then place a sheet of glass and some brown paper on to exclude light. As the seeds take a long time to germinate, some much longer than others, very thin sowing is advisable so that the more forward seedlings may be lifted and transplanted without disturbing seedlings just breaking through the soil. The first transplantings should be done round the sides of large pots, not in the

centre. The next shift should be single plants in small pots and frame treatment.

## VIOLETS; LAYERING AND PLANTING.

There is no better time for layering violets than during the month of April. Old plants growing in frames should be dealt with early in the month and those in outside borders towards the end of it. Of course, suitable runners cannot be grown in one week, they must be selected and taken care of previously. But at this season, on most plants, they are usually plenty to meet the demand. It is not necessary to use any special soil for layering, that on the surface of the bed will do nicely. In the sketch *a* shows a portion of an old plant, *b* the young one nearest to it on the runner, and *c* the end of the runner which would



bear another young, but weakly plant; the stem is cut off at *e* and at *d* a small stone is placed on the surface soil and stem to keep the latter firm till roots are formed. The young rooted plant *f* is shown with both ends of stems *e, e* severed. In the meantime the summer quarters should be prepared so that the young plants can be taken to the beds and planted forthwith. Violets thrive best in a cool border and in a position where they will not be subject to cold draughts as the latter soon encourage the spread of red spider. Avoid over dryness. Plants of the double varieties may be divided if there is a lack of runners.

## TOMATOES TO FRUIT OUTSIDE.

Although the weather, in some years, is adverse to successful cultivation, nine out of ten amateurs like to try to grow tomatoes well outside every year. During the abnormally hot summer

of 1921 tomatoes grew in rows in the open quarters like potatoes, and ripened fruits quite early. The plants thrive in heat and a comparatively dry atmosphere. Ordinarily, it is too risky to expose them in open beds. Sheltered positions, such as borders near to walls and fences facing south, south-west and south-east are the ideal ones. Cultivators who do not possess such quarters may make a good substitute by having a row of runner beans north-west to south-east and planting tomatoes about 4 ft. away on the side facing south-west. The runner beans form a good sheltering background, and on account of their dark foliage it is generally very warm immediately in front of them. But it is very essential to success that strong advanced plants be available to plant out about June 5th in the south and June 12th farther north. Strong pot plants, judiciously hardened, are suitable, of course. Where it is not convenient to have pot plants, make up a bed in a temporary shelter as follows: First put down a layer of ashes 1 in. thick, then a layer of rotten manure 2 ins. deep, and finally a nice, rather lumpy compost 4 ins. deep. Plant at a distance of 7 ins. apart each way. Cover and attend to the plants. When finally planted, each specimen can be lifted with all soil, down to the ashes, adhering, and a check will not occur.

## VEGETABLE MARROWS AND FRAME CUCUMBERS.

If small frames are available for placing on the beds containing the young plants, the latter may be planted in their permanent quarters early in May; but as such frames are not always available, the plants must be potted or transferred to boxes and kept in the cold greenhouse or frame till the beginning of June. After the plants have filled their small pots with roots they should be potted on, as otherwise the leaves would soon turn to a sickly yellow and thus lose strength and valuable time. The middle of April is a suitable time for sowing the seeds. Use a mixture of old chrysanthemum soil and leaf-mould; place one seed in a 3 in. pot and, if necessary, repot into a 6 in. one rather than starve a healthy seedling. In the meantime, prepare the summer bed for the plants, not a heap of litter with a thin layer of soil on the top, but a flat-topped bed about 1 ft. high and composed of rotted manure, decayed refuse from the garden heap and ordinary soil. In such a medium the plants will thrive and hold out in hot weather. Frame cucumbers may be grown without a hot-bed; but the fruits, if a long time swelling, are frequently bitter. Litter and tree leaves, or even the latter alone, form a nice hot-bed on which to place a frame. At first, light friable soil to a depth of 9 ins. should be placed all over the bed, and due top-dressings applied later. Till the middle of June mats should be laid on the glass every night.

GEORGE GARNER.



# THE SIGNIFICANCE OF LEAD ARSENATE SPRAY

## ITS UTILITY AND ITS DANGER.

"WHEN the petals are falling, spray with lead arsenate sprays," says many a treatise on the destruction of fruit pests. That is advice which, judiciously followed, will put a prompt end to the career of armies of tiny grubs which, left to themselves, will find a snug retreat in the cores of fruits with ultimate results which are too familiar to require description.

It should be unnecessary to warn owners of fruit trees that the open winter has once more given an easy hibernating period to the pests which plague the gardener and play havoc with the occupants of the orchard and their crops. Some have sprayed once with some sort of winter wash, some have made a second effort with lime sulphur, others have not sprayed at all, and it is to these latter that a message of urgency is specially directed, for here is another opportunity, and, so far as certain very troublesome grubs are concerned, it is the final chance of the season for an effective onslaught.

The codling moth is a very prevalent pest throughout the orchards and gardens of the British Isles, and it is something of a reproach that this destructive pest has not yet appreciably diminished in numbers and virulence, for it is far from being the most difficult of pests to deal with. Several means of destruction are at the service of cultivators which may be termed alternative measures, but would more properly be brought into co-operative action as will here be explained.

There can be no doubt that an acquaintance with the character and life-history of a pest greatly assists in ensuring success in efforts to combat and annihilate it; therefore our first step shall be to study the codling moth and its larva or grub.

*Carpocapsa pomonella* is the scientific name for the moth, which is of moderately small size, the expanded wings measuring about three-quarters of an inch across, while the body is just about half that length. The antennæ or horns are one-sixth of an inch, spreading almost horizontally with sharply incurving points.

The dominating tint of the forewings is an earthy grey, with dark blotch at the shoulders, and faint transverse, waved stripes of light grey and creamy white variegating the outer half of the wing. The underwings are a dull gold or russety orange, the extreme edge being regularly scored with parallel white marks of hair-like fineness. The grub is of a dirty ivory tint encircled by deeply impressed rings, the head being dark glossy brown.

About the latter end of May the moth is in flight, and is very industrious, flitting from cluster to cluster of the newly set fruit, depositing one egg on each fruit. The apple is a favourite host, but pears are also subject to attack.

It takes but a few days for the eggs to hatch, and the diminutive grub immediately gnaws a tiny tunnel to the interior of the fruit, there to fatten itself upon the softest pulp around the core-walls. Within a month the grub is fully grown, when it travels to the surface of the apple or pear, spins a silken thread by means of which it drops to the ground. The next manoeuvre is to seek a cosy crevice in some abrasion of the bark of the tree trunk, or under a covering of lichen or algæ, and there pupate until the following May, when

the perfect moth appears to commence a fresh cycle of life.

The opportunity for catching the pupæ unawares with caustic washes is past, hence the importance of waylaying the larvæ immediately they are hatched, and before they can gain access to the interior of the tiny fruits. This is the object of spraying with lead arsenate wash, the importance of promptitude surely being perfectly obvious. No spraying can be done while the trees are in full bloom, but as soon as petals have fallen the spray should be upon the trees. The date of arrival of the moth is not to be definitely foretold, but as lead arsenate is a virulent poison which will retain its power for a long period, it is prudent to ensure being in good time.

Lead arsenate is produced by combining acetate of lead with arsenate of soda, but as these are deadly poisons, and capable under careless handling of grave mischief, no recommendation will be made that the spraying compound should be manufactured at home, nor is there the slightest necessity that it should be attempted, for there are abundant proprietary brands of lead arsenate paste on the market made by such highly reputable firms as Lewis Berger, Voss, Strawson, Murphy and others which simply require the addition of water to make them ready for use.

One does not idly recommend the use of virulent poisons, but the scourge of destructive fruit pests is so serious that no available means of real destruction can be ignored, and the vital necessity is that all owners of fruit trees should do their duty in the interests of neighbouring growers as well as themselves, for it is only by concerted effort that the plague of the codling moth may effectively be trampled underfoot.


It is equally necessary that the operator shall be alive to the danger attaching to careless handling of poisonous sprays.

It is no task for the garden boy, and adults should realise that no food crops, such as lettuce, cauliflower or other greenstuff, should be allowed to receive the slightest particle of the solution, therefore spraying must be done only on windless days. Wear gloves and otherwise take rational precaution against bringing lead arsenate or other such poisons into contact with persons or foods.

The codling moth is by no means the only pest for which this powerful spray is a deadly weapon. The currant moth, the gooseberry sawfly, larvæ of winter moths which were not caught by grease-banding succumb to lead arsenate, but although its power is such that it would be a wonderful weapon for use throughout summer, its virulence prompts the counsel that its use should not be extended to the period when varied crops are maturing for use. With caution there is safety; those who cannot exercise care even with poisons should never be allowed to deal with food crops.

Mention of grease-banding recalls the fact that many larvæ of the codling moth have been caught by their aid. It frequently happens that the mischief caused by the grubs inside growing apples causes the latter to fall prematurely. The grubs in the fallen fruit soon work their way out and commence to re-climb the tree trunks. A freshly smeared greaseband around the tree trunk, not too high, will arrest the progress of the grubs and capture them. From late May to July covers the period during which greasebands for this purpose should be kept frequently freshened by re-smearing with grease.

L. I. ATRIS.



Types made include Pneumatic, Hand, Knapsack, Bucket and Wheeled, Wet and Dry Sprayers. Prices from 10/-

**Horse and Hand Hoe Cultivators**

**70/- & 35/-**


**VERMOREL "ECLAIR" Spraying Machines**

*Gained the Highest Awards given in their respective classes at the Royal Horticultural Society's Trials, 1924.*

**COOPER, PEGLER & CO., Ltd.**

**24a/26c, Christopher Street Finsbury Square, LONDON, E.C.2**

*Write for Full Particulars and Catalogues.*





MATTHEWS' HIGH GRADE HORTICULTURAL FERTILISER  
COMPARE ANALYSIS

PROFITABLE GROWING IN 1925  
EXHIBITION & PROFIT  
MATTHEWS' "Maximum Crop" GARDEN SEEDS  
SCOTCH SEED POTATOES  
Choice Flower Seeds  
Finest Spring Bulbs  
Write for Catalogue IT WILL PAY YOU

MATTHEWS' BIG PRODUCTION FERTILISERS  
THOUSANDS OF TONS SOLD ANNUALLY

	Ammon.	Phos.	Potash	lbs.	cwts.
MATTHEWS' HORTICULTURAL For POTATOES & GENERAL GARDEN use.	7%	21%	4%	14 28 56 1 2	3/3 5/9 10/9 20/- 37/6
TOMATO All are "MAXIMUM CROP" COMPLETE MANURES essential FOR ECONOMICAL SUCCESS.	9%	21%	6%	3/6 6/6 12/- 22/6 42/-	
LAWN NOTE—double value compared with some that are sold.	4%	25%	2%	3/- 5/6 10/- 18/6 34/-	
Bone Charcoal ...	1.5%	67%	—	2/9 5/- 9/- 16/6 30/-	
Bone Meal, English, Best ...	4.5%	45%	—	2/9 5/- 9/- 16/6 30/-	
Basic Slag ...	—	30%	—	1/6 2/9 4/9 7/6 13/-	
Bone Flour, Steamed ...	1%	60%	—	2/3 4/- 7/- 12/6 24/-	
Fish Manure ...	10%	14%	—	3/6 6/6 12/- 22/6 42/-	
Garden Salt ...	—	—	—	1/6 2/9 4/6 8/- 14/-	
Hoof and Horn ...	16%	—	—	3/6 6/6 12/- 22/6 42/-	
Kainit ...	—	—	14%	1/6 2/9 4/6 8/- 14/-	
Lime, Ground Carbonate, Superfine ...	—	—	—	1/6 2/6 4/- 6/6 12/-	
Meat and Bone Meal ...	8.5%	18%	—	3/- 5/6 10/- 18/6 34/-	
Meat Meal ...	8%	30%	—	3/6 6/6 12/- 22/6 42/-	
Nitrate of Soda ...	18%	—	—	3/6 6/6 12/- 22/6 42/-	
Peruvian Guano ...	14 1/2%	22%	2 1/2%	4/- 7/7 14/3 27/- 51/-	
Sulphate of Ammonia. 21% Nitrogen ...	25.75%	—	—	3/- 5/9 11/- 21/- 39/-	
Sulphate of Potash ...	—	—	50%	3/2 6/- 11/3 21/- 39/-	
Superphosphate ...	—	35%	—	1/8 3/- 5/3 9/6 18/-	

IT PAYS TO USE MATTHEWS' HORTICULTURAL FERTILISER  
WHEN ORDERING mention this JOURNAL PLEASE

CARRIAGE PAID on orders to the value of 5/- upwards to the nearest station in the United Kingdom  
ESSEX RESIDENTS 1/6 per cwt. less.  
Packing and Bags Free; not returnable.

JAMES & GEO. H. MATTHEWS, Head Office: HAROLD WOOD, ESSEX  
And at COLCHESTER, ONGAR, BRENTWOOD, CHADWELL HEATH, WICKHAM BISHOPS and BRIGHTLINGSEA  
Phone: ROMFORD 284

MATTHEWS' HIGH GRADE TOMATO FERTILISER  
COMPARE ANALYSIS

MORE PROFIT THROUGH EXTRA YIELD AND IMPROVED QUALITY.  
MATTHEWS' LAWN SAND  
Effectively kills all the common weeds in lawns, and at the same time acts as an excellent Fertiliser. Sprinkle evenly over the weedy patches, at the rate of 3-ozs. per square yard, in dry weather. Repeat at intervals of a few weeks, till the weeds are killed. The grass will become brown and appear to be burnt, but it will recover, and the useful grasses will grow more vigorously.  
4/- 14lbs. 66 28lbs. 109 56lbs. 20/- cwt.

FOR ROSE ENTHUSIASTS.

Roses, and How to Excel With Them

By R. V. GIFFARD WOOLLEY.

Illustrated. 2/6. Cloth 3/6.

"COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, London, W.C.2.

GARDEN DESIGN is best dealt with in "Planning and Planting of Little Gardens," by G. DILLISTONE, 6/-; by post, 6/6. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

SWEET PEAS AND HOW TO EXCEL WITH THEM. By HORACE WRIGHT, 9d. net, by post 11d. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

Do YOU waste Sunshine ?  
THE CHASE CONTINUOUS CLOCHE, placed over your young plants, traps the sunshine—keeps the atmosphere inside healthily warm and ventilated—protects the young plants against frost, birds and heavy rain.  
With the Chase Continuous Cloche  
Your plants mature more quickly and fully  
than our neighbours', and are ready weeks ahead of theirs. You get big, fine crops, such as every gardener dreams of—not forced and coddled, but healthy and full-flavoured—just the sort of plants that you would get in the open under perfect growing conditions.  
Write now for BOOKLET No. 7  
It contains a mine of useful information about the use of Cloches.

For General Use send for this case of "A" pattern Cloches. Each Cloche 7ins. high. Case contains 12 Cloches, enough to cover 14 feet 18/-  
For Larger Plants order "B" Cloches. 9ins. high. Set of 15, covering 22 1/2 feet 35/-  
Carriage Paid Home. (Scotland 2d. in 1/- extra.)

Chase Continuous Cloche  
Dept. 7, Chertsey, Surrey



Don't Waste Your GARDEN RUBBISH!

THE ADCO PROCESS  
(Patented in the United Kingdom and Abroad)  
WILL TURN IT INTO  
SYNTHETIC FARMYARD MANURE

ADCO is your garden's "Crop Insurance Policy." It maintains soil fertility at a "low premium" by guaranteeing a supply of organic fertiliser. As refuse accumulates treat it with  
ADCO ACCELERATOR

If at least half consists of soft green materials such as lawn cuttings, cabbage leaves or green weeds; but when dead leaves, vegetable stalks, herbaceous border cuttings, prunings, straw and straw packing, form the bulk of the heap, use Standard ADCO.

If your dealer does not stock ADCO write direct to us, mentioning his name and nearest Goods Station.  
1 cwt. of ADCO makes from two to three tons of manure according to the class of rubbish treated.  
ADCO Accelerator .. 28 lb. 4/6, 56 lb. 8/-, 1 cwt. 15/-  
Standard ADCO .. 28 lb. 8/- 56 lb. 11/6 1 cwt. 20/-  
Carriage paid to nearest station. Cash with order.

ADCO, Ltd. 40, HARPENDEN.



By Appointment.

RANSOMES' LAWN MOWERS

"The Best in the World."

HAND LAWN MOWERS OF ALL TYPES

"Automaton Minor."

The Best Light Roller Machines.

Gear or Chain Drive as preferred.

ALSO  
MOTOR, HORSE, PONY AND DONKEY MOWERS.  
PROMPT DELIVERY.

Write for List No. 111 to  
RANSOMES, SIMS & JEFFERIES LTD.  
ORWELL WORKS, IPSWICH.  
Sold by all Ironmongers and Seedsmen.

Please mention THE GARDEN when writing.





## Beautiful Garden Books

### SECRETS OF MANY GARDENS

By Mrs. PHILIP MARTINEAU  
17 full page illustrations. 12s. 6d. net

### THE HERBACEOUS GARDEN

By Mrs. PHILIP MARTINEAU  
Fourth Enlarged Edition. 32 plates. 12s. 6d. net

### ROCK GARDENS

By LEWIS MEREDITH  
Third Edition. Many illustrations. 10s. 6d. net

### ONE GARDEN:

AN INTIMATE CHRONICLE OF ITS MAKING  
By D. H. MOUTRAY READ  
Profusely illustrated. 12s. 6d. net

### TREE WOUNDS AND DISEASES: THEIR PREVENTION AND TREATMENT

By A. D. WEBSTER  
Profusely illustrated. 7s. 6d. net

### EVOLUTION of PLANTS

By Dr. D. H. SCOTT  
Fully illustrated. 2s. 6d. net

FOR FULL GARDEN CATALOGUE WRITE TO:  
**WILLIAMS & NORGATE, LTD.**  
14, HENRIETTA STREET, LONDON, W.C.2

Please mention THE GARDEN when writing.

### MAINTAINING SOIL FERTILITY

To maintain the fertility of any garden or allotment, it is necessary to keep the soil supplied with the essential elements—nitrogen, phosphates and potash—blended in their proper proportions.

Abol Fertilizers can be relied upon to give the best results, with economy. For full particulars with analysis, please

WRITE FOR  
DESCRIPTIVE FOLDERS.

### AN INTERESTING TREATISE ON GARDEN PESTS GRATIS AND POST FREE

Abol Garden Specialities are sold by all Nurserymen, Seedsmen, Florists, Ironmongers, Chemists and Stores. If any difficulty, write to the Sole Proprietors and Manufacturers.

ABOL, LIMITED,  
9, BELTRING, PADDOCK WOOD,  
KENT.

### Abol Horticultural Fertilizer

A complete all-round Fertilizer. Packages 10d., 1/5 and 2/-; 7lb., 3/-; 14lb., 5/-; 28lb., 8/-; 56lb., 14/-; 112lb., 25/-. Postage extra.

### Abol Hop Manure

Substitute for Stable Manure. Bag (about 1 bushel), 3/-; Bag (about 4 bushels), 7/-; 3 Bags (about 12 bushels), 20/-; 6 Bags (about 24 bushels), 38/-; 10 Bags (about 40 Bushels), 62/6.

### Abol Sweet Pea Manure

7lb., 2/6; 14lb., 4/6; 28lb., 8/-; 56lb., 15/-; 112lb., 28/-. Postage extra. Trial Carton, 1/3, post free.

### Abol Potato Manure

7lb., 2/6; 14lb., 4/-; 28lb., 7/6; 56lb., 13/6; 112lb., 24/-. Postage extra. Larger quantities quoted for.

### Abol Soil-pest Destroyer

Packages, 1/- and 1/9; 7lb., 2/10; 14lb., 4/6; 28lb., 6/6; 56lb., 11/-; 1cwt., 17/6. Postage extra.

Also Tomato Manure, Chrysanthemum Manure, Rose Manure, Abol Non-poisonous Insecticide, Abol Patent Syringes, Spraying Machines, White Fly Compound, Abol Nicotine Fumigating Shreds, etc.

# Abol

## FERTILIZERS

## DULAU & COMPANY LIMITED.

34, 35, 36, MARGARET STREET,  
LONDON, W.1.

NATURAL HISTORY AND GENERAL  
BOOKSELLERS AND PUBLISHERS.

We have just published our  
Catalogue No. 125, consisting  
of 4,439 items of important  
works on Botany.

This Catalogue is divided into the following sections: Regional floras, gardening and horticulture, fruit culture, silviculture, gardens and landscape gardening, biology of plants, monograph biography, etc., herbals and early gardening, cryptogamic botany, phyto-pathology, geponica, and serial publications.

This catalogue will be sent post free on application.

Please mention THE GARDEN when writing.

## HIGH GRADE FERTILISERS FOR QUALITY AND ABUNDANCE.

### No. 1. SEMI-ORGANIC—PERFECT GENERAL PLANT FOOD. Both Stimulating and Lasting.

Amm. 4.5 Phos. 22.5 Sul./Potash 5.6 7 lbs. 1/10 14 lbs. 3/3 28 lbs. 6/- 56 lbs. 11/- 1 cwt. 20/-

### No. 2. ORGANIC PROMOTING HUMUS.

Best Substitute for Stable Manure, Excellent Plant Food, Lasting, Gives Good Heart to Soil.

Amm. 5.5 Phos. 18.2 Sul./Potash 4.8 7 lbs. 2/- 14 lbs. 3/6 28 lbs. 6/6 56 lbs. 12/- 1 cwt. 22/-

### No. 13. 56 lbs. 9/- SPECIAL ORGANIC LAWN. 1 cwt. 16/- Promotes very fibrous turf and thick mat fine grasses.

Cash with order. Carriage Paid U.K.

**H. P. TRIPP, Orchard Works, YIEWSLEY, MIDDXX.**

"T  
R  
I  
P  
P  
L  
E"  
BRAND

Please mention THE GARDEN when writing.

## THE PATENTED ROT-PROOF

# SIMPLICITAS NETTING

FOR  
STAKING SWEET PEAS  
IS FAR AHEAD OF STICKS  
WIRE OR OTHER SUPPORTS

It is equally good for Runner Beans, Edible Peas, Climbing Roses, or as an invisible support for Herbaceous Plants

Made from Special Cotton Cord. Rot-proofed.  
It will last for five years at least.

Particulars and Prices on application

**GARDEN SUPPLIES, LTD., Cranmer St., LIVERPOOL**

Please mention THE GARDEN when writing.



## CATALOGUES RECEIVED.

Clarence Elliott, Limited, Six Hills Nursery, Stevenage.—A complete catalogue of Alpine and Herbaceous Plants for 1925. A useful and extensive list offering a wide choice of species and varieties. An unusual feature is the grouping together of plants suitable for special purposes. This, we think, is a most valuable innovation and should prove of great assistance to both the amateur and professional gardener.

Messrs. J. Cheal and Sons, Limited, The Nurseries, Crawley. An extensive list of Dahlias, containing many novelties for 1925, well illustrated by means of numerous half-tone reproductions.

Mr. John Curtis, Potato Merchant, Chatteris, Cambs.—List of Seed Potatoes.

William Sydenham, The Gayborder Nursery, Melbourne, Derbyshire.—Five very handy lists of hardy herbaceous perennials, delphiniums, chrysanthemums, asters and violas. Each of these lists is made into a neat and compact little handbook which is of a convenient size for the pocket. They are quite a novelty in the way of catalogues. In addition, they are well and clearly printed. A very fine selection is offered in each of the respective lists. Those interested in any of the above subjects should make application for the necessary list.

Glen Road Iris Gardens, Wellesley Farms, Mass., U.S.A.—A useful list with much cultural information which all iris lovers should procure.

Carl Purdy, Ukiah, California, U.S.A.—A list of choice bulbs, well illustrated and packed with useful information as to cultural requirements. Also a separate booklet on perennial plants, with numerous half-tone reproductions.

## PUBLICATIONS RECEIVED.

"Common Sense Gardening," by W. W. Pettigrew (Superintendent Manchester Parks Department), published by the *Sunday Chronicle*, price 6d. A handy manual for amateurs.

"Successful Gardens for Every Amateur," published by direction of Chilian Nitrate Committee. A copy will be sent gratis if application is made to the above body.

"The Making of a Garden," by W. H. Moutray Read. Messrs. Williams and Norgate, Henrietta Street, Covent Garden, W.C.2., price 7s. 6d.

An interesting story of an old house together with an acre of ground which the author acquired. Within its pages is unfolded a simple unvarnished tale of the author's successful attempt to convert what was previously a wilderness into a beautiful garden of old-fashioned flowers. Tales of difficulties met with and overcome and how the everyday problems of the gardener were settled, make a fascinating and almost adventurous yarn which will be enjoyed by all flower lovers.

"Wild Flowers—How and Where to Find Them," by William Platt. Messrs. W. Foulsham and Co., Limited, 10 and 11, Red Lion Court, Fleet Street, E.C.4, price 1s.

"A Garden Time Piece," by M. G. Kennedy-Bell. (Hutchinson and Co., London, price 7s. 6d.)

A most interesting treatise in gardening, full of practical hints and written in simple and direct language, yet with a certain charm that adds appreciably to the value of the book. It is a volume which all garden lovers will enjoy, as the subject is presented in the form of a fascinating tale, aided by numerous half-tone illustrations.

Booklets published in connection with the E. P. Whiteley Course in Horticulture. Much information is presented in a concise and handy form. Further particulars of the course may be obtained from the E. P.

Whiteley Course in Horticulture, Little Garth Fruit Farm, Pershore, Worcs.

"Chronicles of the Garden," by Mrs. Francis King. (Charles Scribner's Sons, 7, Beak Street, London, W.1, price 12s. 6d. net.)

A NEW book covering the whole range of gardening, written with a rare charm and in an easy style. The author is an acknowledged authority in the gardening world of America, and speaks from an intimate and extensive knowledge of plants and gardens. A notable and useful feature in the volume is the planting plans designed by Mrs. King to accompany particular styles of houses. The garden lover will find the book intensely interesting and fascinating from beginning to end.

"The Dahlia Year Book for 1925," edited by W. J. Chittenden. (Issued by the National Dahlia Society, price to non-members, 3s.)

A MOST interesting booklet dealing with various aspects of dahlia cultivation. The contributions by acknowledged authorities will be found to be full of instruction. All lovers of the flower should certainly procure the booklet if they are not already members of the Society.

"The Enemies of the Rose." (Issued by the National Rose Society, price 7s. 6d.)

THIS is a new edition of the Rose Society's most instructive booklet on the insect and fungus pests of the rose, by Fred. V. Theobald and John Ramsbottom. The whole subject matter has been most carefully revised and many additions made to it by these two authorities in their respective subjects, thus bringing it thoroughly up to date. Detailed and concise instructions are also given as to the remedial measures and treatment to be applied when an attack of any of these pests is met with. In addition, there are many coloured illustrations of the chief insect enemies and of the many diseases caused by fungi which will greatly assist the amateur in identifying the particular agent at work on his bushes. It is a most useful work and one which will prove of the greatest service and value to all who are engaged in the cultivation of the rose. The Rose Society and the conjoint authors are to be congratulated on the production of this small but exceedingly valuable manual.

"The New Book of Gardening," Part I. Edited by Walter Brett. (Published by Messrs. George Newnes, Ltd., Southampton Street, Strand, W.C.2, price 1s. 3d.) If the standard of this first part is maintained it ought, when completed, to form an excellent work of reference for all amateur and professional gardeners alike.

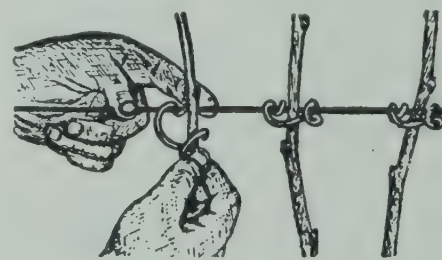
## TRADE NOTES.

"NEVERBEND" TOOLS.

THE greatest recent advance in the construction of garden tools is, undoubtedly, the use of saw steel for the manufacture of spades and forks. Tools made of this grade of metal are lighter, tougher, better balanced and more springy than are those made of ordinary mild steel. They take a keener edge, and retain it longer. When in use they seem to have more "life" and discrimination, though there is no suggestion of "whip." The writer has had in use for four seasons a "Neverbend" spade which is to-day as good as when it was brand new, although, in the winter of 1921, it was deliberately subjected to wrenching tests which would have entirely incapacitated the vast majority of digging tools. The "Neverbend" should make an especial appeal to the amateur gardener who wishes to make the best possible use of his energy, but employers of labour cannot really afford to equip their staff with inferior tools when the use of the best means more and better work with less labour.

## A HANDY PLANT HOLDER.

An interesting novelty, shown below, has just come to our knowledge. It is a simple and economical wire clip device which will be found of great service in the cultivation and training of climbing roses, espalier and all kinds of fruit trees, raspberry canes, tomato plants, etc., which are grown against walls or alongside fences. It consists of small loops of wire which are fitted on to the horizontal piece, which must be taut. This loop, which will hold the branch, can be instantly attached to wire or wire netting in any position. When finished with, it can be removed and be attached elsewhere at will. It dispenses with string and other forms of tying. The only weak point in the device is not so much the actual invention itself as the wire to which it is affixed. We should imagine that this will be apt to become stretched with continued use and will not be able to hold the loop.



The holders, which we understand are a Norwegian patent, are reasonable in price, 2s. 6d. per box of a hundred, and they are obtainable from the majority of seedsmen.

New Carnations Registered with the British Carnation Society.—*Sunset*

(Regd. 12.1.25).—Messrs. Allwood Brothers, Wivelsfield Nurseries, Haywards Heath. Parentage, seedlings. Colour, apricot, lightly flaked old rose. Size, 4½ ins. Mild fragrance. Habit and stem strong and good. A wonderful piece of colouring, a great exhibition variety.

*Butterfly* (Regd. 12.1.25).—Messrs. Allwood Brothers, Haywards Heath. Seedlings. White, lightly overlaid crimson claret. Size, 3½ ins. Fragrance, very strong clove scent. Habit and stem strong and erect. This is quite a new colouring and very beautiful.

*Master Michael Stoop* (Regd. 12.1.25).—Messrs. Allwood Brothers, Haywards Heath. Bright clear cerise. Size, 4 ins. Good fragrance. Habit and stem compact, strong and free. This is a commercial cut flower variety.

*Beauty of Durham* (Regd. 12.1.25).—Messrs. Allwood Brothers, Haywards Heath. Seedling. Bright salmon rose. Size, 3 ins. Good fragrance. Habit very quick. A great improvement on the variety Lady Allington.

*Shot Silk* (Regd. 12.1.25).—Messrs. Allwood Brothers, Haywards Heath. Seedling. Indian chestnut flaked deep salmon red. Size, 3½ ins. Good fragrance. Habit and stem very quick, compact, free. A new colouring which is remarkable under artificial light.

*Cameron of Wivelsfield* (Regd. 12.1.25).—Messrs. Allwood Brothers, Haywards Heath. Seedlings. Rose Dore pink. Size, 4 ins. Fragrance, rich and pronounced clove. Habit and stem strong and erect, but exceptionally free. The flowers of this variety are larger and the colour clearer than Malcolm or Rose Dore, also much freer flowering.

**Lachenalias Re-named.**—Messrs. Barr and Sons desire us to state that the new strain of lachenalias exhibited by them at the Royal Horticultural Society's show on February 24th, under the name of "Excelsior Hybrids," and which were given an award of merit, will henceforth be known as White-well Hybrids. They were originally raised by the Rev. Joseph Jacob, but had been grown for several years in Guernsey by Mr. W. Mauger. We do not think that such well grown lachenalias have been seen before.



# THE NEW KEW HAND-LISTS

HE is a poor sort of gardener who does not wish to know the names of the plants which he grows, and who has no desire to be sure whether the name under which he has received a shrub or herb is right or wrong. This is often not easy to discover. Again, a fruitful source of disappointment to the amateur arises from the fact that many plants are known under several names. One orders *Cytisus tragacanthæformis*, impressed perhaps by its imposing title, only to receive *Genista horrida*, which is already in the garden. And how is one to know that *Cytisus scoparius*, *Sarothamnus scoparius* and *Spartium scoparium* are all the common broom? The Kew Hand-Lists have long been convenient friends in need in matters of this kind; but some of them had got quite out of date, and were of no assistance as regards the crowd of new Chinese and other plants with which in recent years our gardens have been enriched. The new editions now in course of issue are therefore very welcome. Four sections have been published since the year began. "Trees and Shrubs" (4s. 6d.) makes a solid little book of 340 pages. The old "Herbaceous Plants" has been split into three sections, since the whole, in view of accretions, would have been bulky and expensive if issued in the old style. We have now "Rock Garden Plants" (2s.); "Hardy Monocotyledons" (1s. 6d.) and "Herbaceous Plants," excluding the two groups just mentioned, (2s. 6d.).

The monocotyledons, being a botanical subdivision, are clearly defined, but there is a natural difficulty in separating rock plants from herbaceous plants. From this triple division adopted it follows that a rock plant is a small dicotyledon and a herbaceous plant a large dicotyledon. And not even always this, for where a genus belongs chiefly to one or other section, the whole is often thrown into that section, with the result that, for instance, the 4ft. *Saxifraga peltata* becomes a rock plant and the 4in. *Gunnera magellanica* a herbaceous plant. In other cases, where there might be some doubt as to where a genus should be found, it is repeated in two of the sections—*acæna*, for instance, in "Rock Garden" and "Herbaceous," *daphne* in "Rock Garden" and "Trees and Shrubs." Other genera which contain a number of plants belonging to two or more of the divisions are split up, and appear partly in one list and partly in another—such are *achillea*, *alchemilla*, *anthesis*, *aquilegia*, *artemisia*, *aster* (in two sections); and *potentilla*, *spiræa*, etc. (in three). But we can often not be quite sure as to the section in which a plant may be placed; it is not easy, for example, to draw a line between *Anemone apennina* and *blanda* in the "Rock Garden" section, and *nemorosa* and *ranunculoides* in the "Herbaceous." The moral is that one should possess all three sections of the herbaceous catalogue if one wishes to be fully armed. This is clear when one finds half a dozen willows listed in the "Rock Garden" volume which find no place in the "Trees and Shrubs," though even the smallest willow is a true shrub. But despite such small inconveniences and discrepancies, the splitting up of the former herbaceous hand-list will meet with general approval, since, at worst, the specialist in one or other section will find in one handy and cheap list at least 95 per cent. of the plants in which he is interested.

The publication of these lists, representing as they do the species at present grown at Kew, brings home to one the great increase in the number of cultivated plants during recent years. (By the way, although only the Monocotyledon list bears the prefix

"Hardy," the other three lists also include only those species which are hardy at Kew or nearly so, and consequently many genera fall far short of the total species grown.) The genus *saxifraga*, for instance, now displays some 130 species, 70 hybrids and 110 varieties. *Rhododendron* is much larger, including no fewer than 325 species and hybrids, with the prospect of innumerable others to follow! *Primula* extends to 170 species and hybrids. Truly the plant-lover nowadays need not pine for new plants to grow. In such genera as *rhododendron* and *primula*, where much laborious work has been done in recent years, the nomenclature may be taken as up to date and correct. But in the Introduction to the lists a warning is given that many plants have been entered merely under the names by which they were received. The gardener is, perhaps, prone to think that there should be no doubt as to the correct name of a plant, and that if professed botanists differ about it or hesitate over it, it only shows that they know neither the plants nor their own minds. But the fact is that the mere describing and naming of new plants has entirely run away from their comparison and collation in their respective genera; there are few groups which do not need revision and general tidying up, and there are large areas of the earth's surface of which the whole vegetation is in need of re-study. Take the South African flora. If twenty botanists with twenty mops swept it for half a century, perhaps the botanical carpenter would be able to comfort the horticultural walrus; but till such a consummation is achieved, we must worry along as best we can, botanist and gardener alike.

In the three sections of herbaceous plants, synonyms are given alphabetically among the accepted names, distinguished by italics, and followed by a reference to the accepted names. This is a very convenient arrangement. In the "Trees and Shrubs," on the other hand, a larger number of synonyms (and also of references to figures of the plants) is given, but these are placed together,

following the accepted name, so that they cannot at once be found. If we look for *Bryanthus taxifolius*, for instance, it may be some time before we discover it tucked in under *Phyllodoce cœrulea*. The former plan is preferable, and no doubt the latter was adopted only as a concession to economy of printing.

Looking over those genera to which many additions have been made in recent years, one notes with regret a tendency to increased length in specific names. For Linnæus, *albus* and *niger*, *alpinus* and *pratensis*, and other easy Latin terms mostly sufficed; but *charisostreptum* and *rhaibocarpum*, *hæmatochilum* and *pseudochrysanthum* are rather terrifying to the amateur. Perhaps all the shorter descriptive names have been used up. And the authorities for the names show a corresponding degree of complexity. "L., "D.C.," "Lam.," sufficed for the founders of systematic botany; but we have travelled beyond that now, presumably because the simple initials are all appropriated. So we get such overwhelming combinations as *Rhododendron hypo epidotum Balf.f.* and *W. W. Sm.*—sixteen syllables minimum, enough to stampede anyone but the most hardened systematist. It is astonishing that any plant can live under such a crushing designation. The name itself is descriptive, and to that extent acceptable. One wonders if by convention the authority might not be contracted. *B.* and *S.* would be compact and crisp, and a gratifying stimulus after ten syllables of Greek. R. LLOYD PRAEGER.

## EXCHANGE.

SIR,—Can any of your readers supply me with seeds of the following any time during the coming season? I would either buy or exchange. I can collect in exchange seeds of *Lilium philadelphicum*, *Rosa pratincola*, *R. blanda*, *R. acicularis*, *Populus tremuloides* and a number of other native Canadian plants. Seeds required: *Iris mandschurica*, *Alberti*, *trojana*, *Korolkowi*, *dichitoma*, *Caragana jubata*.—F. L. SKINNER, *Droptmore, Manitoba, Canada*.

He can only tackle them one at a time  
but—



# VERMOL

## KILLS WORMS AND GROWS GOOD GRASS

What users say of Vermol:—

The Sunningdale Golf Club:—

"VERMOL WORM KILLER has been used on this course for a number of years. When it is applied in warm muggy weather and well watered in with a hose, no Sunningdale worm can resist it."

## VERMOL PRODUCTS CO.,

### 61, St. Mary Axe, London, E.C. 3

Telephones: Aven 1869 & 1870.

Telegrams: "Pinerous, Phone, London."

Vermol Lawn Sand  
(Weed Killer)

Vermol Grass Manure  
(for impoverished turf)

Vermol Insecticide  
(for Leather - Jackets  
and other soil pests)

Vermol Grass Seeds  
(Finest Mixtures for all  
purposes)

Above specialities also  
highly recommended.

VERMOL  
gets the lot







**WATERER'S GOLD MEDAL RHODODENDRONS and Azaleas.** Rare Hardy Shrubs, Alpine and Perennial Plants, Vegetable and Flower Seeds, Scotch Grown Seed Potatoes, Bedding Plants and Dahlias. Catalogues Free.—**JOHN WATERER, SONS AND CRISP, LIMITED,** Twyford (Berks.), Bagshot (Surrey), and London.

**WAKELEY'S PATENTED HOP MANURE.**—The original and only substitute for Stable Manure. See advert on back cover.

**WM. DUNCAN TUCKER & SONS, LTD.,** Lawrence Road, South Tottenham, N.15.—Conservatories, Winter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**BIRDS' BATHS, GARDEN VASES, SUN-DIALS, NESTING BOXES.** Catalogue (No. 4) free.—**MOORTON, 60, Buckingham Palace Road, S.W.**

**RIVERS' ASPARAGUS.**—Strong roots, one, two and three years old. Fruit trees, Roses, Vines and Orchard House trees of first-class quality. A large stock always on view. Inspection invited. Price list post free.—**THOS. RIVERS AND SON, LIMITED,** The Nurseries, Sawbridgeworth, Herts.

**GARDEN SPADES, SPECIAL, 2/6, HAND GRUBBERS, 1/6.** Carriage Paid.—**MCINTOSH, Forgue, Aberdeenshire.**

**TANNED GARDEN NETTING,** small mesh, 25yds. by 1yd., 2s.; 25yds. by 2yds., 4s.; 40yds. by 1yd., 3s. 3d.; 40yds. by 2yds., 6s. 6d.; 40yds. by 3yds., 9s. 9d.; carriage paid. Compare our netting with others. Lists now ready.—**GALLOP, Net Manufacturer, Hastings. Telephone: 352.**

**TO LOVERS OF ROCK GARDENS.**—Inexpensive plants for Sale. Apply **NELL SHAW, Hatfield Place, Bath.**

**WELLS' CATALOGUE OF CHRYSANTHEMUMS** now ready, and will be sent post free on application.—**W. WELLS & Co., Mersham, Surrey.**

**WM. ARTINDALE & SON, Nether Green** Nursery, Sheffield, will be pleased to send their Catalogues of Hardy Plants, Seeds and Gladioli on request.

**TENNIS BOUNDARY NETTING, 50 yds. x 4 yds., 20/-.** Iron Standards, 9 ft., 3/- each. Tennis Nets from 3/-. Sports Lists now ready.—**GALLOP, Net Manufacturer Hastings**

**ORCHIS FOLIOSA,** splendid flowering roots of this charming hardy border plant, 2/6 each; 10 for 20/— **MORRIS, Formakin, Bishopton, Renfrewshire.**

**HERBERT CHAPMAN'S Bargain List of Job** Lots of choice Daffodils, offered in order to clear ground, is now ready, and will be posted to anyone sending a p.c. to **HERBERT CHAPMAN, LTD.,** Rotherside Gardens, Rye, Sussex.

**ALPINES, ROCK PLANTS ONLY.**—Descriptive Catalogue 600 varieties, free.—**TERRY LEE, F.R.H.S., 12, Morden Road, Stechford, Birmingham.**

**FOR 10/- I send free to you 14 rooted and sound cuttings of Carnations in 7 of the best named new Riviera varieties and 7 different colours.**—**P. GEYER, Horticulteur, St. Jean, Antibes, A.M., France.**

**FULL OF WISE SAWS AND MODERN** instances our catalogue offers all that is brightest and best for the present day garden. The choice plant at Sixpence a time may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—**FEILDEN AND CROUCH, 2, Fairseat Nurseries, Wrotham, Kent.**

**ROCK PLANTS. RARE SPECIES, AND** Garden Hybrids. List Free. Rock Garden always open for inspection.—**MISS TAYLOR, Quarry Orchard, Cleurs, Reigate.**

**NEW ZEALAND PLANTS** for Seaside Gardens.—**Pittosporum nigrescens** for hedges, pot grown plants for planting, now 18/- per doz. **Olearia Macrodonia**, 1 1/2 ft., 12/- doz., splendid for hedges. **Olearia Haasti**, 1 ft., 12/- per doz. **Brachyglottis repanda**, 2/6 and 3/6 each. **Leptosiphon indivisa**, 2/6 each. **Ozothamnus**, 2/6 each. **Muhlenbergia complexa**, 1/6 each.—**TRESEDER & Co., The Nurseries, Luro.**

**BARR'S FLOWER & VEGETABLE SEEDS,** of finest selected strains and tested growth, also the best Scotch grown, hand-picked Seed Potatoes, strong Asparagus Plants, etc.

**BARR'S HARDY PERENNIALS, ALPINES, ROCK PLANTS, AQUATICS, CLIMBERS, TALL and DWARF FLAG IRISES, etc.,** for Spring planting.

**BARR'S LILIES, GLADIOLI, DAHLIAS, CANNAS, MONTBRIETIAS, ANEMONES, BEGONIAS, TUBEROSES, TIGRIDIAS, &c.,** for Spring planting. Catalogues free.—**BARR & SONS, King Street, Covent Garden, W.C.2.**

**THE DOUGLAS CLOVES AND BORDER CARNATIONS;** glorious scent, stiff stems, and continuous flowering. The new crop of seed is now ready to sow. 2s. 6d. and 5s. per packet. Plant catalogue now ready.—**J. DOUGLAS (The Premier House for Carnations), Gt. Bookham.**

**IRON AND WIRE FENCING FOR GARDENS.**—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—**BOULTON AND PAUL, LIMITED, Norwich.**

**ALL PROFESSIONAL GARDENERS** should become Members of the British Gardeners' Association. Full particulars (stamp).—**JOHN WEATHERS, 1, Park View, Isleworth.**

**SEWAGE DISPOSAL FOR COUNTRY HOUSES.**—No emptying of cesspools; a perfect fertiliser; no solids; no open filters: perfectly automatic; everything underground. State particulars.—**WILLIAM BRATTIE, 8, Lower Grosvenor Place, Westminster.**

**JAMES BACKHOUSE, F.L.S., F.R.H.S.,** for many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to **CAER FEGLA, Arthog, North Wales.**

**LAXTON'S NEW SEED CATALOGUE,** containing Novelties for 1925. New Pea "Bedford Champion" and "Laxton's Progress," post free on application. Fruit Tree Catalogue and Cultural Hints can also be sent, post free, on request.—**LAXTON BROTHERS, Nurserymen, Bedford.**

**ROCK PLANTS, best varieties, inexpensive,** list free.—**MARION GLEDSTANES, Fardross, Clogher, Ireland.**

**CHOICE NEW CHRYSANTHEMUMS.**—Our Catalogue of nearly 900 varieties, including Grand Novelties for 1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready. Post free on application.—**J. W. COLE AND SON, Chrysanthemum Specialists, Peterborough.**

**PRIMULA, ALPINE AND PERENNIAL** Seeds, from large (1,500) collection, sold cheap. List free.—**REV. J. F. ANDERSON, Glenn Hall, Leicester.**

**GARDEN NETS.**—Best tanned, small mesh, 25yds. by 1yd., 2/-; 25yds. by 2yds., 4/-; 25yds. by 3yds., 6/-; 25yds. by 4yds., 8/- Carr. Paid. Satisfaction guaranteed. Tennis nets from 10/-. Special nets for tennis boundary. Pea training nets. Lists and samples free.—**G. JARRETT, Net-maker, Rye.**

**TENNIS COURT FENCING.**—A speciality. Made up as complete enclosures, with standards, wire, and straining posts, from 6 ft. to 12 ft. high. Write to Dept. FP/G for particulars.—**BOULTON AND PAUL, LTD., Norwich.**

**VANCOUVER ISLAND and Pacific Coast** rare ornamental alpine and lowland plants, bulbs, etc. Only those difficult or impossible to obtain in England are offered. Plants well packed and despatched at the right time of year arrive in good condition. Write for list.—**J. BENNETT, Lake Hill P.O., Victoria, B.C., Canada.**

**IMPROVE YOUR GARDEN** by the use of solid Oak Trellis Screens; they are ideal for growing creepers of all kinds and for securing privacy, at the same time adding an artistic feature that will last a lifetime (being pickled in preservative). No trouble to erect (being made in sections). Send for lists and get an estimate from **W. T. REVITT, Railway Works, Olney.**

## SUTTONS SEEDS

for present Sowing.  
Collections of Vegetable Seeds, 5/9, 8/3 and 11/3.  
Collection of Vegetable and Flower Seeds, 10/9.  
Post Free.  
The finest value offered to-day.  
**SUTTON & SONS, THE KING'S SEEDSMEN, READING.**

**DOBBIE'S 1925 CATALOGUE AND GUIDE,** 136 pages, 194 illustrations. Free to all readers. Please mention **THE GARDEN** when writing.—**DOBBIE & Co., LTD., Edinburgh.**

**BATH'S SELECT SEEDS AND PLANTS.**—New Illustrated Catalogue of choice Vegetable and Flower Seeds and Plants is now ready, and will be sent post free on application.—**(Dept. E), R. H. BATH, LTD., Floral Farms, Wisbech.**

**CHEAP GOVERNMENT WIRE!!!** Great for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mille (full 1,760yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—**GREEN'S GOVERNMENT STORES, 69, Albert Street, Lytham.**

**108 GLADIOLI for 8s. 9d. post paid.**—The most dazzlingly brilliant flowers on earth, with spikes of blooms 18ins. long; 12 each of 9 kinds (108 bulbs), all separately packed and named, for 8s. 9d., post paid; half lot, 4s. 9d., post paid (cultural instructions and beautifully illustrated Flower and Vegetable Catalogues included).—**J. KAY AND Co., Goodmayes Road, Goodmayes, Essex.**

**BEGONIAS AND GLOXINIAS.**—Kay's prize strain with blooms often measuring 8ins. across: a collection of 12 Single and 12 Double Begonias, also 6 Gloxinias—all separately packed and named, with cultural instructions and illustrated catalogues, for 6s. 3d., post paid; half lot, 3s. 6d., post paid.—**J. KAY AND Co., Goodmayes Road, Goodmayes, Essex.**

## HEDGING PLANTS.

**PRIVET.**—Strong English-grown, bushy and well rooted:  
30-36ins. .. .. at 13/- per 100.  
36-40ins. .. .. at 15/- per 100.  
**QUICKTHORN.**—Extra bushy:  
24-30ins. .. .. at 10/- per 100.  
Carr. Pd. on 1,000 Lots.—**HODSONS, Castlegate, Nottingham.**

**MICHAELMAS DAISIES.**—Pyrethrums and other hardy perennials. For new catalogue write to **MRS. THORNEY, Nursteed, Devizes.**

**GOVERNMENT TROUSERS AND JACKETS,** New, 6/9; Soiled, 3/9. Post Free.—**MCINTOSH, Forgue, Aberdeenshire.**

**GARDEN NETTING.**—Best selected, small mesh, tanned, 25 by 4 yds., 8/-, or 8 yds., 16/-. Carriage paid. Tennis Nets and Standards. List free.—**STRAWBERRY NETTING Co., 5, Suffolk Terrace, Lowestoft.**

**LOOK! TANNED GARDEN NETS.**—All orders despatched same day. 25 yards by 1 yard, 2/-; 25 by 2, 4/-; 25 by 3, 6/-. Odd netting for bushes, 6 lbs. for 2/6. All carriage paid. Any sizes supplied. Also Tennis Boundary Nets.—**MOORE & Co., Net Works, Rye.**

**MATTHEWS' big production Fertilisers.**—Thousands of tons sold annually. For prices, see **THE GARDEN**, January 24th, 1925 (page vii). Catalogue of Scotch Seed Potatoes and Seeds on application.—**JAMES AND GEORGE H. MATTHEWS, Harold Wood, Essex. 'Phone Romford 284.**

**CAULIFLOWER PLANTS.**—Best (Autumn-Sown) Plants.—Early London and Walcheren, 12/6 per 1,000; prompt delivery, carriage paid: cash with order. Special quotation for large quantities, and Price Lists of all varieties of Cabbage Plants (Autumn-Sown) of the best stocks and at the lowest prices, on application.—**JOHN GILLIES, PRESTONPANS, LTD., Prestonpans, East Lothian.** Largest cabbage plant growers in Britain. Established over 50 years. Telegrams, "Plants, Prestonpans." Telephone 24 Prestonpans.

**GREENHOUSE PAINTING AND GLAZING.**—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kgs extra; 7lb. tins., 4/- post free; 14lb. tins., 5/6 each, carriage extra, tins free.—Full particulars from **W. CARSON & SONS** Grove Works, Battersea, S.W.11.



**GLORIOUS GLADIOLI**

**SPECIAL OFFERS. GRAND VALUE.**  
**LARGE FLOWERED. SPLENDID MIXTURE.**

Second Size .. per 100, 5/-; 250 for 11/6; 500 for 22/6  
 First Size .. 7/6; 250 for 18/-; 500 for 35/-  
 First Size, extra choice .. 10/-; 250 for 23/6; 500 for 45/-

**PRIMULUS VARIETIES (Grand for Cutting)**

*Splendid Mixture. Same Prices as above*

**BEGONIAS (GOLD MEDAL STRAIN)**

**SINGLE** (any colour), per doz., 1/6; 25 for 2/9; 50 for 5/-  
**DOUBLE** .. per doz., 2/-; 25 for 3/6; 50 for 6/6

*Orders value 5/- Carriage Paid.*

Ask for Special Gladioli List and Compare our Prices.

**LONGSTAFF & SONS,**

*Bulb Growers, Importers and Merchants,*  
 Near **CHELSFIELD STATION, Kent.**

**SALE BY AUCTION OF**

**TOPIARY WORK**

(Clipped Box and Yew),

**RARE CONIFERS**

(Each tree is lifted with a good ball of soil, thus assuring safe transplanting);

Also **GARDEN FURNITURE, GARDEN ORNAMENTS, &c.**  
 By Messrs.

**PROTHEROE & MORRIS,**

At **67 & 68, CHEAPSIDE, E.C.2,**

On **FRIDAY, MAY 1st, 1925, at 1 o'clock.**

Catalogues on application.

**"KILSLUG"**

*The only remedy for Slugs.*  
**Price 1/6 per tin. By post, 6d. extra.**

From Horticultural Sundriesmen or the **CENTAUR CHEMICAL CO., LTD.,** Basinghall Street, London, E.C.2

Try our **"Marvel"** Collection of dependable seeds for a 300 yards' plot, carriage paid for 5/-  
 Potatoes excluded! Catalogue included!

**UPSTONES, Seed Experts, ROTHERHAM**

**CRISP'S PERENNIAL BROCCOLI**

Lasts many years and gives a crop each year of from 5 to 12 good heads.

**SOW SEED NOW, 1/- per Packet;** or place your order for plants to be sent in May, 1/- per doz., 5/- per 100.

**H. C. GROOM & CO., 5, Guilden Sutton, CHESTER**

**The Glen Road Iris Gardens**

**SPECIALIZE IN RARE AND FINE VARIETIES OF BEARDED IRISES**

*Send for List*

**Grace Sturtevant, Prop.**

**Wellesley Farms . Massachusetts . U.S.A.**

**VIOLETS FOR BEDS, ROCK GARDENS AND NATURALIZING.**

**MISS STANISTREET** can supply now healthy young plants, properly selected and packed by an expert, from her Unique Collection of over 50 Varieties.

: : Descriptive List Free. : :

**KILLALOE, OO. CLARE.**

**SOIL PESTS DESTROYED**

by **"ALPHOL"**

Sample 14 lb., 3/6 carr. paid

Write for particulars of this and other reliable Garden Helps, Lawn Improvers, "Veribest" Seeds, etc., to

**Garden Supplies, Ltd., Cranmer St., Liverpool**

*Please mention THE GARDEN when writing.*

**BOULTON & PAUL**

*for High-Grade*

**HORTICULTURAL BUILDINGS**

**A GOOD CONSERVATORY**  
**WILL** add a value and charm to your house, but it must be well-designed and well-built.

If you select a B. & P. Conservatory you can be sure of the quality and workmanship. B. & P. Glasshouses are sturdy, weatherproof erections which are built to last. Why not invite Boulton & Paul to help you in your choice?

A staff of expert designers is at your disposal. Should you so desire we will send our expert representative to consult with you and prepare schemes for any kind of Horticultural work. *ENQUIRIES invited for Conservatories, Glasshouses, Peach Houses, Vineries, Carnation Houses and Horticultural Work of every kind, and Heating Installations for Garden or Residence. Garden Frames a speciality, stocked in a variety of sizes.*

**APPARATUS FOR HEATING IN ALL ITS BRANCHES.**  
**WRITE TO DEPT. G. AW.**

**Boulton & Paul Ltd**

Telegrams  
**BOULTON NORWICH**

**NORWICH**

Telephone  
**NORWICH 851 (5 lines)**

**LONDON OFFICE 135-137 QUEEN VICTORIA ST. E.C.**

Telegrams: **Boutique Cent London** Telephone **4642 Cent**

**No. H47a. LEAN-TO GREENHOUSE**

Of neat appearance and sound construction, this House is made specially for placing against a sunny wall facing South, South-East, or South-West.

Size 10 ft. by 7 ft. in four sections, with bolts for easy re-erection. Painted one coat. Glass cut to size, and packed in boxes, **£15**

If glazed at Works, painted two coats, packed in close cases to prevent damage, **£19-6-0**

Carriage paid to most stations in England and Wales. Prices for stages and heating sent on application.

Write for our free copy of special booklet which tells you all about this Greenhouse. Mention G. 169.

**WEEDS**

One application of

**HARRISON'S Reliable WEED KILLER**

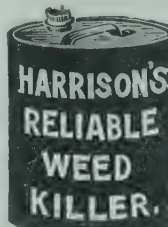
will keep your Garden Paths, Carriage Drives, etc., free from weeds for at least 12 months. The best Killer for Daisies, Plantain and Dandelion in Lawns. Brightens the Gravel. Immense Saving in Labour.

5 Gallons .. 23/6 Drum .. 12/- extra, Carr. Paid  
 10 " .. 42/6 " .. 15/- " "  
 40 " .. 150/- Cask .. 80/- " "

*Irish orders are not subject to these carriage terms but are paid to any English port. Full price allowed for all drums and casks if returned in good condition carriage paid within 2 months.*

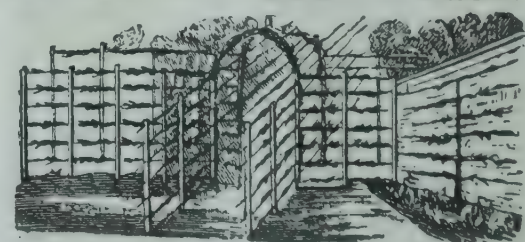
N.B.—In the prices of the above please note that this Weed Killer mixes 1 to 50 of water, being double the ordinary strength. One gallon mixed with 50 gallons of water will cover an area of from 150 to 200 square yards effectively.

**G. HARRISON,**  
 Horticultural Chemist,  
**READING.**

**HILL & SMITH, Ltd., BRIERLEY HILL, STAFFS,**

Makers of

**IRON FENCING, HURDLES, GATES, WIRE NETTING AND GARDEN IRONWORK**




Other Products—Hay and Grain Sheds, Dutch Barns, Galvanized Corrugated Sheets and Structural Steelwork.

Catalogues free on mentioning this paper.

London: **8, VICTORIA ST., WESTMINSTER, S.W.1**



**PULHAM'S**  
FOR  
ROCK  
FORMAL  
JAPANESE  
**GARDENS**  
71-NEWMAN ST LONDON-W.

 **1925**  
CATALOGUE of  
Perpetual-Flowering  
**CARNATIONS**  
If you are interested and would like a copy, post your name and full address to:  
**C. ENGELMANN, Ltd.,**  
SAFFRON WALDEN, Essex  
*Please mention THE GARDEN when writing.*

**VATT'S' POLYANTHUS PRIMROSES**  
1st Class Certificate Nat. Prim. Society  
YELLOW - - - per pkt. 1/- 2/6  
YELLOW and WHITE - - - 1/- 2/6  
WHITE - - - - - 1/- 2/6  
RED, CRIMSON and DARK - - - 1/- 2/6  
MIXED - - - - - 1/- 2/6  
BLUE and VIOLET - - - - - 1/- 5/-  
**The Welsh Bulb Fields :: St. Asaph**  
*Please mention THE GARDEN when writing.*

**MANURES.** The most complete little book on the subject is "The Manual of Manures," by H. VENDELMANS. 5/-; by post, 4/9. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.  
**NEW GIANT SWORD RUNNER BEAN**  
The Most Wonderful Runner Bean in the World, one pod enough for one person.  
40—1/6, 80—2/3, 120—3/- 200—5/-  
GIVEN FREE WITH ALL ORDERS—Packet of our famous Golden Balloon Prize Winning Onion Seed. Onions now 2-5 lbs. in weight. Also packet of Spiral Brussel Sprout Seed.  
Address—H. GALE, King's Somborne, Hants.

**38th SEASON**  
**Mrs. PYM'S Famous Plants**  
**GOOD AND CHEAP**  
Send for New Spring Catalogue  
— NOW READY. —  
Plant NOW for Success.  
Magnificent choice hardy Perennials, Rockery Plants, Spring Flowering Plants, Hardy Climbers, Choice Hardy Flowering Shrubs, Splendid Plants for Cool Greenhouse, &c.  
ALL STRONG HEALTHY PLANTS. THE BEST I HAVE EVER HAD TO OFFER. EVERY PLANT A BARGAIN.  
Named, carefully packed and guaranteed to arrive in excellent condition. Stock your gardens with really excellent plants.  
**Mrs. PYM (F.R.H.S.) & CO.**  
10, Vine House, Woodston, Peterboro'  
*Please mention THE GARDEN when writing.*

**REAMSBOTTOM & CO.'S**  
**GAYGARDEN**  
**ST. BRIGID ANEMONES**  
GOLD MEDAL

NONE GENUINE WITHOUT OUR GOLD MEDAL SEAL  
Wonderfully improved in Form and Colours.

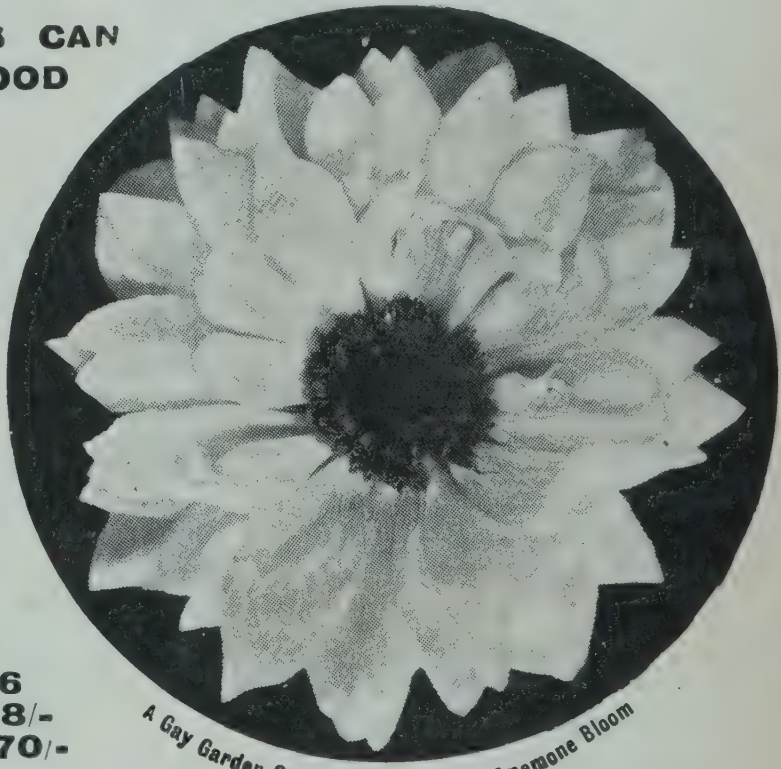
FEW FLORAL SIGHTS CAN  
COMPARE WITH A GOOD  
BED OF THEM.

**PLANT NOW.**

**REAMSBOTTOM & CO.'s**  
LATEST IMPROVED  
"GAYGARDEN"  
GOLD MEDAL ST.  
BRIGID ANEMONES

are the finest in the world.  
NONE ARE GENUINE WITH-  
OUT OUR GOLD MEDAL SEAL

12	..	..	..	3/-
24	..	..	..	5/6
50	..	..	..	9/6
100	..	..	..	18/-
1,000	..	..	..	170/-



A Gay Garden Gold Medal St. Brigid Anemone Bloom

Full Cultural Directions sent that  
will ensure success to every Amateur

**ALSO PLANT NOW**

**DELIGHTFUL, FRAGRANT, SPRING-FLOWERING AURICULAS.** Lovely rich velvety colours, vastly superior to those usually seen. If you do not appreciate Auriculas, try ours, and you will be delighted. 6, 2/6; 4/9 doz.

**CARNATION, EARLY FLOWERING FRENCH.** Single and giant double flowers of exquisite mixed colours, very fragrant, 6, 2/-; 12, 3/6.

**ASTER KING GEORGE (NEW).** Extra large-flowering Michaelmas Daisy; huge bluish-violet blooms, 1/6.

**MYOSOTIS ROYAL BLUE.** Dark intense electric blue; strong grower. 15, 1/6; 100, 7/6.

**MYOSOTIS VICTORIA.** (Hen and Chickens Forget-me-not). Sweetest little blue. 12, 1/6; 24, 2/9; 100, 8/6.

**CHRYSANthemum MAX. FIANCEE (NEW).** Showy new large white Ox-eye Daisy; strongly recommended, 1/-.

**LUPINUS POLYPHYLLUS.** Purple and white, 4, 1/3; 12, 3/-.

**FRAGRANT TREE LUPIN.** White. 2, 1/4; 6, 3/6.

**LUPINUS ROSEUS** (Pink Lupins). Our glorious strain of these hardy perennial Lupins, most lovely shades of pink. 2, 1/3; 6, 3/-.

**PHLOX EVELYN (NEW).** Large flowers and immense size, richest salmon-rose shade, an exquisite novelty, 1/6.

**PHLOX FIREGLOW (NEW),** huge trusses of brilliant orange-scarlet, with dark centre, 1/6.

**PAPAYER KING GEORGE** (striking novelty), bright scarlet, with fimbriated petals. 1/3 each.

**PAPAYER MAHONY.** Chocolate colour, rare. 1/6.

**GAILLARDIA GRANDIFLORA.** Our splendid improved extra large-flowered; choicest rich yellow, with crimson or brown markings. 4, 1/4; 12, 3/6.

**GENTIANA ACAULIS.** The glorious Blue Gentian, prized wherever a hardy flower is grown. Very dwarf. Likes a loamy soil, with broken stones mixed through it. Extremely hardy. 3, 2/3; 12, 7/6.

**PINKS, EXCELSIOR,** blush with scarlet centre. A strong favourite, 6, 2/6; 12, 4/6.

**PRIMULA OBCONICA GRANDIFLORA HYBRIDS.** Very beautiful Primulas; most valuable window or garden plants; never seen to be out of bloom, 3, 1/6; 6, 2/9; 12, 5/-.

**SWEET WILLIAMS.** Wonderful Giant Mixture. Our strain is a wonderful variety of colours, and customers are always delighted with the very large flowers. Giant mixture. 15, 1/9; 50, 5/-; 100, 9/6.

**EDELWEISS.** This very hardy, much-sought-after alpine plant has pretty silvery foliage, with star-shaped, silvery flowers. 2, 1/3.

**HOLLYHOCKS.** Single Mixed. Our selection, mixed, strongly recommended. 6, 2/-; 12, 3/9.

**BERGAMOT (MONARDA DIDYMA).** The deliciously scented true fragrant Bergamot, with striking scarlet flowers, 2, 1/4.

For other varieties, also Roses, Fruit Trees, etc., please see our ILLUSTRATED CATALOGUE FREE. All Cash orders of 15/- value and over carriage paid or post free, packed by experienced hands. For Free Delivery, smaller orders, 5/-, 10/-, add respectively for Carriage or Postage, etc., 1/- and 1/9. Safe Arrival and Satisfaction Guaranteed.

**REAMSBOTTOM & CO.**  
Tower Nurseries, West Drayton, Middlesex (Also at Geashill, Ireland)

Please address to Tower Nurseries, WEST DRAYTON, and mention THE GARDEN when writing.

**FREE MONEY SAVING BONUS**  
CUPON. — 20 per cent.  
worth of Additional Plants FREE and  
delivered carr. paid on orders over  
15/- value if you enclose this  
coupon. — Quality  
superb. — T.G.



# GLADIOLUS

**FIRST-SIZE BULBS.  
FINEST VARIETIES.**

	per doz.	100
America, lilac rose .. ..	1/6	10/0
Baron Hulot, indigo blue ..	1/9	12/6
Glory of Holland, pure white	1/9	12/6
Golden West, orange-scarlet ..	1/9	12/6
Halley, delicate salmon-pink ..	1/6	10/6
Love's Fire, coral scarlet ..	2/6	17/6
Loveliness, creamy white ..	2/3	15/0
Niagara, nankeen-yellow ..	1/9	12/6
Panama, deep pink .. ..	1/9	12/6
Schwaben, soft yellow ..	1/9	12/6
War, deep blood red .. ..	1/9	12/6
White Giant, pure white ..	1/9	12/6
COLLECTION 100 in 10 varieties ..	13/6	
„ 120 „ 12 „ .. ..	16/6	
„ 240 „ 12 „ .. ..	30/0	
Primulinus Hybrids ..	1/5	10/6

All Bulbs Carriage Paid. Catalogue Free.

## WM. POWER & CO., WATERFORD.

Please mention THE GARDEN when writing.

### STORRIE'S TINY SEEDLINGS

Save time and attention in seed rearing. Choice Greenhouse Flowers, Half-hardy and Hardy Perennials, Tender Annuals and Bedding Plants in Tiny Seedlings, ready for pricking out at correct dates. Advanced Plants a little later. Write for Catalogue.

**STORRIE & STORRIE, The Specialists,**  
Glencarse, PERTHSHIRE.

Fig 10 2 ft.

**"EVERYMAN'S" PATENT NETTING SUPPORTS**  
For Protecting SEED-BEDS and Plants from BIRDS.  
SIMPLY PERFECT.  
PERFECTLY SIMPLE.

Price (as illustration) 8/- per dozen.  
Larger size, 20 ins. above ground, 12/-



Also "EVERYMAN'S" Patent SEED-SOWER, WALL BRACKETS and WALL-CLIPS, and EVERYMAN'S Patent

**STRAINING-WIRE**  
for rapid and easy securing of Raspberry Canes, Loganberries, Etc.  
See page 218 of last week's "Garden."

From LEADING DEALERS, STORES, ETC. If out of Stock write Dept. G.,

**HOUSE & GARDEN SUNDRIES Co., Ltd.,**  
10, EASTCHEAP, LONDON, E.C.3.

Please mention THE GARDEN when writing.



*Destroy those Insect pests*  
IN YOUR GARDEN BY  
SPRAYING WITH  
**"KATAKILLA"**  
NON-POISONOUS  
POWDER, INSECTICIDE, WASH,  
Certain Death to  
**GREEN-FLY CATERPILLARS  
RED SPIDER WOOLLY APHIS**  
and all other plant  
destroying Pests.

Ready for mixing with water.  
Clean to handle. Easy to use.

2/- Cartons (for 10 gallons wash)  
6/- " " 50 " " "

Off your local trader, or direct from  
**McDOUGALL & ROBERTSON, Ltd.,**  
BERKHAMSTED, Herts (formerly of Manchester).




## FOSTER & PEARSON LIMITED

Established 1841

Please write for Estimates  
for durable Greenhouses,  
Boilers, etc., to

**BEESTON  
NOTTS**

### KING'S ACRE CATALOGUES

are convincing, original and interesting, and the personal service offered, embodies the principle of "*The little more and how much it is,*" which has made our name world famous.

### KING'S ACRE

is the home of Horticultural Ideas, with trained, practical, experts specialising in all branches of Horticulture, each of whom is at your service.

### KING'S ACRE

Nurseries are one hundred and forty acres in extent and were originally established in the year 1785. Our specialities have been awarded 87 GOLD MEDALS, a fact which testifies to the excellence of our stocks.

### KING'S ACRE

should be consulted whenever you require either Useful or Ornamental additions for Garden or Estate. Your enquiries will receive immediate attention, and all information and catalogues are sent free on request.

All enquiries to:—

**KING'S ACRE NURSERIES, Ltd. HEREFORD**

Please mention THE GARDEN when writing.



**CARNATIONS** for Garden & Greenhouse**PERPETUAL FLOWERING  
(Greenhouse) Varieties**

We carry large stocks—rigidly selected—of all the best varieties. For immediate flower we offer fine plants in 6" pots in bud. Young stock, ex 3½" pots, stop, ed and broken, to pot along, or plant, ready now.

All Collections are *curr.* and packing paid for cash

6 plants in variety	6" pots	ex 3½" pots
12 " "	24/-	8/6
25 " "	45/-	16/-
25 " "	80/-	30/-

**ALLWOODII (Half Pink, half Carnation)**

New and delightful self colours have been introduced in the ever popular Allwoodii—the hardy plant which grows and flowers in every garden and window-box. The collections quoted below are of exceptional value, and include many quite new and unique varieties.

6 plants in variety, 6/6 12 plants in variety, 12/- 25 plants in variety, 22/6

**HARDY PERPETUAL BORDER CARNATIONS**

Will eventually supersede the old Border type, being hardier, freer flowering, carrying bolder and more sweetly perfumed flowers. A much wider range of colour is now obtainable, and the following collections are first-class value, embracing many of the later kinds. All plants ex 3½" pots—immediate delivery.

6 plants in variety, 15/- 12 plants in variety, 27/6

CATALOGUE of all CARNATIONS POST FREE ON REQUEST but order the above collections at once for prompt delivery, and exceptional value.

The leading  
Carnation Raisers  
and Specialists  
in the World.

Dept. 4, Haywards Heath, Sussex.

Please mention THE GARDEN when writing

Send your Enquiries NOW for

**Autumn Planting of**

**CHOICE DAFFODILS**

**BRITISH GROWN BULBS**

COMPLETE CATALOGUE NOW  
READY, FREE ON APPLICATION

**Cartwright & Goodwin Ltd.**

**BULB GROWERS,  
CHURCHILL, KIDDERMINSTER,  
WORCS., ENGLAND.**

Please mention THE GARDEN when writing.



**ROYAL SHOW**

**CHESTER**

**July 7th to 11th, 1925.**

84TH ANNUAL EXHIBITION of LIVE STOCK,  
POULTRY, DOGS, AND FARM PRODUCE. HORSE  
JUMPING. AGRICULTURAL EDUCATION, FORESTRY.

**HORTICULTURE**

**Entries close May 27th.**

(Live Stock entries close May 1st.)

Prize-Sheets and Entry Forms will be forwarded  
on application to

T. B. TURNER, Secretary.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND,  
16, Bedford Square, London, W.C.1.

**MAINTAINING  
SOIL FERTILITY**

To maintain the fertility of any garden or allotment, it is necessary to keep the soil supplied with the essential elements—nitrogen, phosphates and potash—blended in their proper proportions.

Abol Fertilizers can be relied upon to give the best results, with economy. For full particulars with analysis, please

WRITE FOR  
DESCRIPTIVE FOLDERS.

**AN INTERESTING  
TREATISE ON GARDEN PESTS  
GRATIS AND POST FREE**

Abol Garden Specialities are sold by all Nurserymen, Seedsmen, Florists, Ironmongers, Chemists and Stores. If any difficulty, write to the Sole Proprietors and Manufacturers.

ABOL, LIMITED,  
9, BELTRING, PADDOCK WOOD,  
KENT.

**NEW CHINESE RHODODENDRONS**

A few superb hardy novelties. Plant in April & May

- R. *Clementinae* (Kingdon Ward 4177), white, suffused pink, darker markings. First discovered by G. Forrest in 1913. 4-5ins 7/6
- R. *racemosum* (Forrest 19404), pink. This is Forrest's finest form; a very suitable shrub for rock gardens or mass planting. 9-12ins. 7/6
- R. *fastigiatum forma* (Kingdon Ward 4456). Another fine dwarf species with deep purple flowers and crimson style. 12-16ins. 7/6
- R. *multiense* (Kingdon Ward 4023), bright sulphur yellow 9-12ins. 7/6
- R. *cephalanthum Series* (Kingdon Ward 3998), varying shades of a rose pink to milk white 7/6
- R. *Arboreum Series* (Kingdon Ward 3784), flowers of the deepest crimson. 6-12ins. 10/-
- R. *Lapponicum Series* (Kingdon Ward 4184), brilliant lavender-blue. 6ins. 7/6
- R. *yunnanense* (Kingdon Ward 4309-4322), bluish pink with brownish crimson markings, one of the best species for the ordinary garden, vigorous under almost any conditions. 8-12ins. 5/-
- R. *fiatolactum* (Kingdon Ward 4509), pure white with a crimson blotch; magnificent foliage. Worthy of the best situations in the garden. 5-6ins. 10/-
- R. *Virgatum Series* (Kingdon Ward 4994) of the deepest pink hue; autumn flowering. 10-12ins. 5/-
- R. *Delavayi* (Kingdon Ward 3948), scarlet, with black glands. 9ins. 10/-
- R. *Kingdon Ward 5001*, flushed pale pink, winter flowering. 6ins. 5/-

This fine set of twelve for £4 4s.

Full list of hundreds of new Rhododendrons on application. When ordering please mention this paper.

**HILLIER & SONS, Tree Specialists, WINCHESTER**

**Abol Horticultural Fertilizer**

A complete all-round Fertilizer. Packages 10d., 1/5 and 2/-: 7lb. 3/-; 14lb., 5/-; 28lb., 8/-; 56lb., 14/-; 112lb., 25/-. Postage extra.

**Abol Hop Manure**

Substitute for Stable Manure. Bag (about 1 bushel), 3/-; Bag (about 4 bushels), 7/-; 3 Bags (about 12 bushels), 20/-; 6 Bags (about 24 bushels), 38/-; 10 Bags (about 40 bushels), 62/6.

**Abol Sweet Pea Manure**

7lb., 2/6; 14lb., 4/6; 28lb., 8/-; 56lb., 15/-; 112lb., 28/-. Postage extra. Trial Carton, 1/3, post free.

**Abol Potato Manure**

7lb., 2/6; 14lb., 4/-; 28lb., 7/6; 56lb., 13/6; 112lb., 24/-. Postage extra. Larger quantities quoted for.

**Abol Soil-pest Destroyer**

Packages, 1/- and 1/9; 7lb., 2/10; 14lb., 4/6; 28lb., 8/6; 56lb., 11/-; 1cwt., 17/6. Postage extra.

Also Tomato Manure, Chrysanthemum Manure, Rose Manure, Abol Non-poisonous Insecticide, Abol Patent Syringes, Spraying Machines, White Fly Compound, Abol Nicotine Fumigating Shreds, etc.

**Abol**  
**FERTILIZERS**

**SPRING PLANTING.**

THE PRESENT IS A GOOD TIME TO PLANT  
**HARDY PERENNIALS, ALPINES, SHRUBS AND  
CLIMBERS** in pots.

Large and varied stocks to offer in fine condition.

DESCRIPTIVE CATALOGUES on application.

**THE BARNHAM NURSERIES, LIMITED,  
BARNHAM, SUSSEX.**

Please mention THE GARDEN when writing.

**CHEAP GOVERNMENT WIRE !!!—Great**

for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760 yards). Postcard to-day for free samples and list of 300 bargains.—GREEN'S GOVERNMENT STORES, 121, Albert Street, Lytham.

**ALPINE PLANTS  
and SEEDS.**

**1925 CATALOGUE NOW READY.**

Sent free on receipt of post card.

Besides being the catalogue of  
a large collection it is also a

**Handy Book of Cultural Reference.**

**GAVIN JONES &  
INGWERSEN,  
LETCHWORTH.**

Please mention THE GARDEN when writing.



## GOLD MEDAL R.H.S. :: 1925.

# Daffodils Daffodils

Before placing your order for the Autumn, send for my new

### DESCRIPTIVE CATALOGUE

Just published.

Therein you will find full particulars of all the choicest varieties and all are

## HOME GROWN BULBS

*We invite all enquiries on  
THE DAFFODIL.*

For Awards see R.H.S. report.

Catalogue post free on application to

**J. LIONEL RICHARDSON,**  
Prospect Gardens,  
WATERFORD, IRELAND.

*Please mention THE GARDEN when writing.*

## Yes! Hydrangea Mad!! Why Not?

A fascinating and glorious feeling that gives real enjoyment to its possessor.

### THE MODERN HYDRANGEA

gives this delightful sensation and everyone can enjoy it by growing these wonderful new varieties; they are easy to grow, last longer, and are more effective in the greenhouse or garden than any other plant. The colours are a surprise and a delight, ranging from white, mauve, soft pink, rich pink, rose-pink, deep rose, salmon-pink, rosy red, clear red, blue, mauve-blue, blue on old rose, etc. Their cost is moderate compared with their great decorative value. H. J. J. has probably the finest collection in the world, and would welcome a visit or enquiries from all who are interested in Hydrangeas. H. J. J. offers his selection 12 young plants in 12 distinct named varieties for 12/6. 12 ditto large, ex 5in. pots, 25/-; 12 ditto large that will give 4 to 8 large trusses, for 50/-. Large specimens for tubs, 15/- and 21/- each. All delivered free for cash with order.

SEND FOR CATALOGUE.

H. J. JONES, Ryecroft Nursery, LEWISHAM S.E. 13

## FOR THE GREY GARDEN

BEAUTIFUL LAVENDERS, ETC., for planting now.

Munstead, dwarf, bushy and free,  
specially good 30/- per 100 250/- per 1,000  
Old English - - - 35/- „ 100  
Grappenhall (tallest) - - - 35/- „ 100  
Dutch (silvery foliage) - - - 35/- „ 100  
Cotton - - - 50/- „ 100

Catmint (Nepeta Mussini) - 25/- „ 100  
Rosemary, extra bushy - - 6/6 „ doz.  
Southernwood (Boy's Love) 1-1½ ft. 6/6 „ doz.  
Gum Cistus (C. laurifolius) 1-1½ ft. 10/6 „ doz.

## YEWS! YEWS!! YEWS!!!

Come and see our Clipped Yews in Bird, Ball and many shapes, £5 5 0 to £26 5 0 each

BAMBOOS in 37 species and varieties.  
Cheap collections of Alpines, Perennials,  
Water Plants. Catalogues Free.

HILLIER & SONS, West Hill Nurseries, WINCHESTER.

## Notes from Maidstone.

### GRAPES AND FIGS FOR COLD GREENHOUSES.

The following can be recommended for planting NOW:

Grapes.—Black Hamburg—without doubt the best all-round grape for a cold house. It sets freely and is easy to cultivate, essentially the Amateur's Grape. Of the white varieties, Foster's Seedling is the best; it sets well, crops freely, the skin is thin and the flavour most refreshing.

Planting Canes, 10/6, 15/- and 20/- each.

Figs.—These are most successful fruits for cold houses; perhaps the most popular is Brown Turkey, but there are other dark varieties easy to grow. Among white varieties, White Ischia is particularly good. Small plants, 5/- each; larger, 7/6 and 10/6 each.

VEGETABLE AND FLOWER SEEDS.—We would remind readers that our seeds are nearly as famous as our Fruit and invite a trial. Catalogues free.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.

# BRITAIN'S BEST BULBS

## ALL HOME GROWN.

GOLD MEDAL R.H.S.  
1925.

## DAFFODIL LOVERS SHOULD PLACE THEIR ORDERS NOW.

### A FEW GEMS.

To ensure the best results we advise planting by the end of August, although this may be continued later. The following are some of the choicest varieties:—

**ACE OF DIAMONDS (Poeticus).**—This is undoubtedly the finest all-red eyed Poeticus yet seen. Each, 35/-.

**BERNARDINO (Incomparabilis).**—A very bold and beautiful flower; large creamy perianth, suffused deep orange; a good free grower. A.M. Each, 1/3; doz., 12/-.

**CRESCUS (Incomparabilis).**—This famous flower is still the finest richly coloured Incomparabilis. Each, 5/-.

**DACTYL (Poeticus).**—In size, substance and quality, this is the high water mark in Poetics; a very vigorous grower. Each, 18/-.

**DONAX (Incomparabilis).**—One of the late Mrs. Backhouse's remarkable introductions. A most distinct and striking flower, having a broad yellow perianth and wide orange-scarlet cup. Each, 4/-.

**DRAGON.**—Undoubtedly, one of the most brilliantly coloured Narcissi extant. Flower as large as ALBATROSS, with fine, spreading, white perianth of good substance, and large, shallow, spreading crown of clear, bright vermilion. Each, 5/-.

**EVEREST (White Trumpet).**—The flower is pure white throughout and is of fine waxy texture, having broad, well formed perianth, standing at right angles to the trumpet. Award of Merit, 1922. Each, £2 10s.

**FESTIVE (Incomparabilis).** A very beautiful and brilliantly coloured flower; overlapping but pointed perianth, shaded yellow towards base of segments; long crinkled crown, flushed clear orange-scarlet. Each, 12/6.

**FIRETAIL.**—Without doubt the finest red-crowned Barrii yet seen. A.M., R.H.S., 1920; F.C.C., 1922. Each, 10/6.

**GOG (Yellow Trumpet).**—A very early and very vigorous Yellow Trumpet; a fine long stem, carried very erect. Each, 5/-.

**GOLDEN PEDESTAL (Incomparabilis).**—This is without doubt the finest self yellow INCOMPARABILIS yet seen; a flower of the most perfect form and quality. Award of Merit. R.H.S., 1922. Each, £9.

**IRISH PEARL.**—One of the very best Giant Leedsii ever raised from MINNIE HUME, crossed with a Trumpet. Each, 3/-; per dozen, 30/-.

**JERSEY CREAM (Bicolor Trumpet).**—One of the most beautiful and distinct bicolors on the market. The bloom has great substance and waxy texture; white perianth, with well flanged trumpet. Each, 15/-.

**LADY PRIMROSE.**—A most magnificent Bicolor Trumpet, a noble flower, waved creamy white perianth, and immense, graceful bell-mouthed, soft, full, primrose-yellow trumpet. Each, 17/6.

**LADY SACKVILLE (Giant Leedsii).**—This we consider one of the finest varieties raised by the late Mrs. Backhouse. It is remarkably early, of the purest white, excellent form, and fine lasting qualities. Each, 45/-.

**MAGOG.**—A splendid, graceful, self-golden giant Trumpet of immense stature and vigour. Somewhat after KING ALFRED in style, but larger. Will grow where KING ALFRED fails. A.M., 1922. Each, 4/6.

**MARKET GLORY (Giant Incomparabilis).**—A very large and very tall flower, having rich deep lemon-yellow perianth, and large, long crown, flushed throughout with glowing coppery red-orange; a gorgeous decorative flower, and one that we shall hear of a good deal in the near future. Each, 35/-.

**MOIRA O'NEILL (Bicolor Trumpet).**—Is a large flower, over four inches in diameter, with a broadly overlapping white perianth, composed of beautiful, large, flat-pointed segments of wonderful smoothness. Each, £2.

**SELINA MALONE.**—Certainly one of the finest Bicolor Trumpets yet offered. Flowers of enormous size, yet of beautiful quality, having grand, broad, smooth white segments and noble, clear soft lemon trumpet; grows with great vigour. Each, 7/6.

**SILVER FOX.**—A very large and striking Giant Leedsii with spreading white perianth and large, well expanded, crown, which is more or less reflexed at the brim; the crown opens sulphur, but very soon the whole flower passes to pure white. Very tall and vigorous; a fine effective garden plant. Each, 6/6.

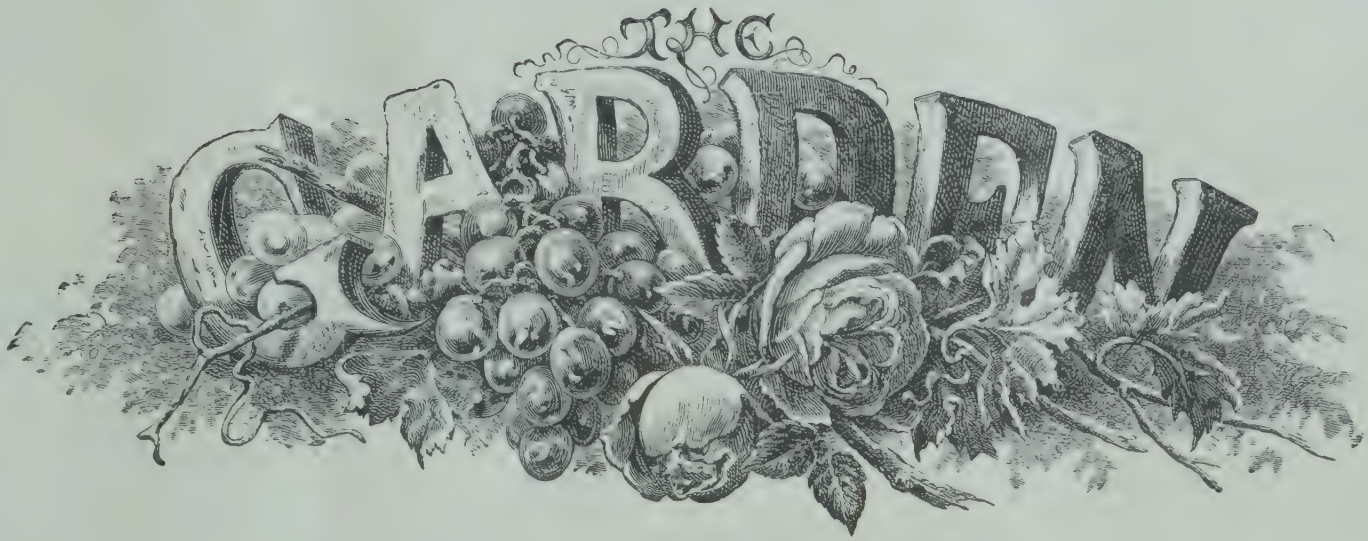
**SUNRISE (Barrii).**—One of the prettiest and most useful Narcissus grown, very distinct. Perianth white, with broad primrose bar down the centre of each petal; crown expanded and beautifully fluted, bright orange-yellow, with fiery scarlet margin. First Class Certificate. Each, 1/9; per dozen, 18/-.

**TENEDOS (Giant Leedsii).**—The sensation of 1921. Both in London and Birmingham this variety came in for more praise than any other variety, and rightly deserved it. When first opened the crown is primrose, but passes soon to pure white; of first-rate texture. First Class Certificate. Birmingham, 1924. Each, £5 10s.

**WHITE EMPEROR (White Trumpet).**—From the standpoint of the florist and exhibitor alike, this superb flower is unrivalled. It has attained in the marble-like smoothness and solidity of its texture, and classical purity, and perfect symmetry of its outline, a point of excellence beyond which it is difficult to imagine much improvement. For many years it will be indispensable to all who aspire to the front rank as exhibitors, and to the hybridist it will be no less essential; it is a very free seeder. Each, 30/-.

COMPLETE LIST WILL BE FORWARDED POST FREE ON APPLICATION.  
**DONARD NURSERY Co.** (WILLIAM SLINGER, Sole Proprietor), **Newcastle, Co. DOWN**





VOL. LXXXIX.—No. 2788.

Price Threepence. Yearly Subscription. Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.

Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2.

Entered as Second-class Matter at the New York, N.Y., Post Office.

APRIL 25, 1925

Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.

## THE SOURCE OF PLANTS

AT this time of year I should give a dissertation on the joys of spring; if I could, I should write a thrilling and, perhaps, grilling account of a garden at Timbuctoo. And yet, pleasant though heat may be, it is not really good for gardening. Gardens in the tropics on a whole are poor things. In Java, for instance, the only flowers that I can vividly remember as inhabitants of gardens are cannas, gardenias and various members of the large family of convolvulacæ. They are bold and flashy in flower, like some overdressed dowager, but they are unsatisfactory from the æsthetic point of view; there is nothing personal or affectionate about them. They are all too fat or too luscious; they either smell too much or not at all. I remember arriving at a hotel in Java, I think it was at Djokjokarta, and choosing a bedroom because outside the window there was an enormous bush of gardenia in full flower. It must have been 10ft. high and 8ft. through, and every morsel of it smothered in bloom. This thrilled me and I imagined the night air made fragrant by the smell of these hundreds of blossoms being wafted into my room. So heavy and sickly was the air that I woke up in the night with a headache, knocked over the candle in looking for the matches, trod on a cockroach while looking for the candle, disturbed a praying mantis at his devotions on the verandah, and so shattered any romance that I had regarding the gardenia. I now look upon it as a buttonhole flower, and look upon masses of it from a distance.

A friend of mine once told me of his first sight of a big rafflesia—I think it was in Sumatra—an enormous purple cup, like a gigantic crocus, rising from the decaying trunk of a tree. It looked weird and rather beautiful at a distance until on examination he found that the petals were so fleshy and smelled so much like carrion that they were riddled with fat, squashy-looking maggots. And so is romance in tropical flowers usually destroyed. They are gross and rather bestial.

The same thing happens when temperate flowers are grown in the tropics. Those that have any individuality worth talking about refuse to grow; others lose their delicacy and fragrance and become overfed and coarse. There is little doubt that the fight for life against odds makes for individuality and elegance and good breeding. Whenever a plant finds life too easy it becomes rank and gross. We hear of all that is best in China—the rhododendrons, primulas, meconopsis—but we never hear of the ragtail and bobtail's of the Chinese flora, of the masses of coarse rubus and

heracleums and senecios and saussureas and impatiens which tousele many a fine landscape with their coarse growth. In the tropics all plant life is easy, if the plant will grow at all, which makes for uninteresting flora and horticulture.

With all our difficulties in the way of climate, gardening at least is fascinating in this country. The element of doubt and the gamble on an unknown horse satisfies our adventurous spirits, but, if only the origins of plants are traced to their sources, look what a wonderful world tour lies before us: Berberis Darwinii and fibrous-rooted begonias from the Andes, mimosas and gums from Australia, Plagianthus Lyalli from New Zealand, gladioli from South Africa, cherries from Japan, primulas from China, rhododendrons from the Himalayas, orchids from the Amazon, peaches from Georgia, heaths from the Mediterranean, gentians from Switzerland, azaleas from the United States. Their variety is unending and the interest is immense. And yet how few gardeners realise the fascination of tracing plants. Their desire begins and ends in the knowledge that a plant came from a reliable source, that it is the right colour, and that it is easy to grow. There is a great deal of romance hidden in the introduction of plants, and in addition, as I have pointed out before, there is the added advantage of finding out something about a plant's mode of life. There is sure to be some book of travel in the library which will describe the climate and appearance of a country even if the collectors omit to do so. For instance, I should advise all who are interested in plants from Yunnan and Szechuan to read "Three Years in Western China," by Sir Alexander Hosie. He only mentions economic plants, but gives a description of the country which is eminently practical and readable, and which will be found exceedingly useful to anyone who intends to visit that part of the world. Similarly, we have numerous volumes dealing with other countries from a geographical standpoint which are both interesting and full of instruction.

E. H. M. C.

### AMONG OTHER ARTICLES IN OUR NEXT ISSUE WILL BE:

SHRUBS FOR THE ROCK GARDEN—II, by Dr. R. Lloyd Praeger.

PLANT HOLIDAYS, by H. Stuart Thompson.

THE SELECTION AND MAINTENANCE OF LAWN MOWERS.



# DWARF SHRUBS IN THE ROCK GARDEN—I

BY DR. R. LLOYD PRAEGER.

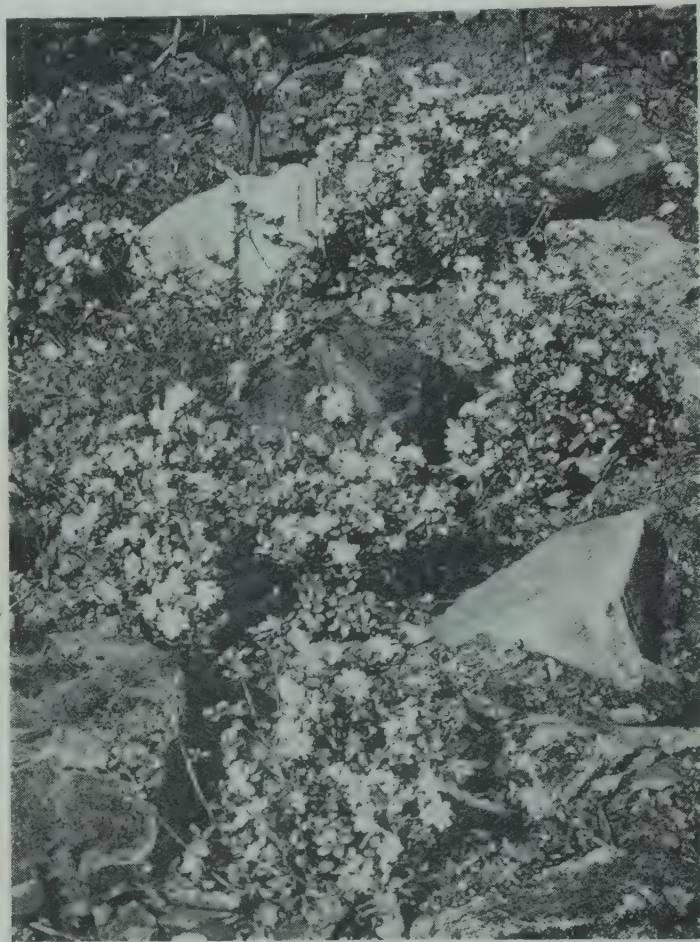
DWARF SHRUBS OF ALL KINDS SHOULD FIND A PLACE IN THE ROCK GARDEN, NOT ONLY BECAUSE OF THEIR EFFECTIVENESS IN WINTER BUT ALSO FOR THE CONTRAST THEY AFFORD TO MANY FLOWERING SUBJECTS ALREADY THERE.

THE use of dwarf shrubs among the boulders and slabs of stone and the cushions and carpets of greenery that together form the essential features of the rock garden is general, and, when properly directed, advantageous. It is only in a small degree logical, as very few of the shrubs which we employ for the purpose are natural inhabitants of either alpine heights or rocky places. But in the rock garden we usually strive to break up into ridges and hollows and sheltered nooks what might otherwise look merely like a slope artificially strewn with stones. This is, of course, most fitly done by the rocks themselves, but very few of us can emulate Edinburgh and import two-ton blocks to produce an effect of pinnacle and recess; and here the dwarf shrub is of great assistance.

Then again, shrubs are much more useful than rocks to give shelter—just as a hedge breaks the wind while a wall only produces eddies. And a rock garden is, in spite of all our efforts, in reality such an artificial thing that the presence of alien shrubs does not make it more so. Thus we may justify the use of the shrub which forms a mound or pyramid of foliage. There is another important group of shrubs which are prostrate, spreading over the ground or falling in cataracts over rock-faces. These really take a place among the rock plants themselves; their growth and their use are similar to those of many pinks and thymes, arabis, aubrietia and so on. And perhaps we might make a third category to include the really tiny shrubs, like cassiope, bryanthus and the smallest of the willows and veronicas, which also we use as we would an alpine plant.

Taking together the dwarf trees, shrubs and sub-shrubs which, under various circumstances, it may be advantageous

to use in the rock garden, we have quite a considerable army, allowing us a wide range of choice—tall, or short, upright or creeping, dense or slender, evergreen or deciduous, with leaves



A DWARF SPECIES FOR THE ROCKERY, RHODODENDRON INTRICATUM WITH LAVENDER BLUE FLOWERS.



ONE OF THE MOST DISTINCT TRAILING SHRUBS OF RECENT INTRODUCTION. COTONEASTER HUMIFUSA.

and flowers of every shape and colour. It is impossible to arrange them in any natural sequence, and for convenience we shall use the rough growth-form classification already sketched. We may begin with the smallest examples, as these for practical purposes come nearest to the rock plants themselves.

Cassiope is a genus of about a dozen tiny heath-like plants, a few inches high, with minute, often adpressed leaves and single white or pink bells like lily of the valley. They are mostly difficult, for they come from high alpine or arctic places and need a cool damp soil and climate. *C. tetragona* is much the easiest, and often does well in a shady, peaty, well drained spot.

Phyllodoce (or bryanthus) also belongs to the ericaceæ, and is a small group of delightful tiny shrubs with clusters of white or pink hanging bells. *P. empetrifolia* is the most satisfactory in the garden, with little yew-like leaves and abundance of rosy bloom. Like the last, it must have a lime-free, moist soil, and is fond of peat.

*Loiseleuria procumbens*, the "mountain azalea," is the tiniest of all: a minute creeping shrublet not uncommon in the Scottish Highlands, and widely spread over alpine and Arctic Europe. Its dark evergreen leaves and erect rosy bells are very pleasing. The species of the three genera so far named, all need the same treatment, and all are difficult in southern England; in the north of Scotland probably all would do much better.

The gaultherias are also ericaceæ, and also like peat and shade. They are pretty evergreen low shrubs with bell-shaped blossoms not very conspicuous. *G. trichophylla* and *G. nummularioides* are quite small, only a few inches high, spreading by underground shoots; *G. Veitchiana* is pleasing, and larger in size; *G. Shallon* is rather rampant for the rock garden, and suits the woodland better.



Even yet the list of small ericaceous gems is not exhausted. There is *Bruckenthalia*, a delightful evergreen shrublet with heath-like leaves and rosy bells, quite easy in a light peaty soil; *Vaccinium Vitis-idaea*, the native cowberry, makes a healthy evergreen clump with small pinkish bells; and, finally, there are the dwarfer heaths and rhododendrons. Of the heaths, the well known *E. carnea* in its various forms is quite invaluable, growing in any soil and almost any situation, and flowering in profusion before even the *Kabschia saxifrages* venture to push timidly forth. Some of the many forms of the ling, *Calluna vulgaris*, are dwarf enough to come into the present category—such as vars. *aurea*, *Foxii*, *minima* and *tenuis*. Of the dwarfest of the vast army of rhododendrons I cannot speak from personal experience, as I have never had a suitable soil for them. Even where this exists, I fancy they do not prove over easy; but they are very lovely things, and—never venture never win. The smallest species includes *R. intricatum*, *R. kamtschaticum*, *R. prostratum*, *R. Williamsianum*, *R. Sargentianum* and *R. impeditum*. It will be seen that the ericaceae alone supply a whole series of tiny shrubs, most of them of great beauty, and many of them challenging all the resources of the gardeners' art.

A number of other ericaceous things will need mention when we come to the less tiny rock garden shrubs. Of other small shrubs that take their place among the tuft-forming rock plants we have *Spiraea decumbens*—(*S. procumbens*) and the closely allied *S. Hacquetii*, neat little deciduous bushes with flat panicles of white flowers; *Hypericum fragile* and *H. olympicum*, with low mounds of glaucous foliage and a glorious wealth of golden bloom in summer; the pretty *H. Coris*, with smaller leaves and flowers; the tiny and delightful *H. cuneatum*, with scarlet buds; and so on. There are tiny veronicas, such as *V. salicornioides* and *V. loganioides*, like little heaths or cypresses; lovely small daphnes—*D. Blagayana*, *D. petraea*, etc.—over which one may lavish much care; various bushy thymes, which need no care at all; and those two excellent minute shrubs, *Polygala Chamæbuxus* from the Alps, and *P. Veyredæ* from Spain, which Dr. Stapf considers should be

placed in a separate genus and called *Chamæbuxus alpestris* and *C. Veyredæ*; and we may finish up this section with that miniature hedgehog, *Erinacea pungens*, which needs a hot dry corner.

Turning now to trailers and prostrate small shrubs, we may mention first some *quite* prostrate ones, which form little green lakes or waterfalls in the rock garden. One of the loveliest of these is *Hypericum reptans*, with its great golden blossoms lying on bright green foliage. *Linnæa borealis* is a most dainty trailer, with twin flowers like little bells—it likes peat and shade. *Coprosma Petriei* forms a close green mat, very different from the others of the genus. The well known *Polygonum vacciniifolium* is invaluable, covered with erect spikes of pinkish bloom in autumn. *Dryas octopetala*, with its delightful big white and gold flowers, is too well known to need more than mention. *Daphne Cneorum* is (or ought to be) grown by every flower-lover. *Empetrum nigrum*, the native crowberry of our heaths, makes a fine carpet, but as in *Coprosma Petriei* the flowers are insignificant. Then the invaluable ericaceae supply several good carpets, two native plants, the bearberry, *Arctostaphylos Uva-ursi* (for dry peat), the tiny cranberry, *Oxycoccus palustris* (for damp peat); also the may-flower of North America, *Epigaea repens*, which many gardeners find as difficult as the last two are easy. Some of the alpine willows, too, like *Salix reticulata*, *S. retusa*, *S. herbacea*, are very flat and very pleasing. To come to things that are not quite so carpet-like, the dwarf cotoneasters are hard to beat, with their red berries and leaves colouring in autumn. *C. humifusa* is the most close-growing of them, and *C. adpressa*, *C. congesta* and *C. thymæfolia* are all first-rate. *Lithospermum prostratum* needs no praise here, nor the dainty var. *prostratus* of the rosemary—but this is not over-hardy in some districts. With the mention of some of the beautiful



DAPHNE PETRÆA WELL REPAYS A LITTLE CARE.

prostrate junipers, like *J. Sabina* var. *humilis* and var. *tamariscifolia*, and that quite prostrate native form which is the *J. communis* var. *nana* of botanists but apparently not of Bean's "Trees and Shrubs," we must pass on.

## A WANDERER'S NOTE BOOK

### A NEW STATION FOR AQUILEGIA ALPINA.

**B**ETWEEN 7,000ft. and 8,000ft., near the base of the limestone precipices that overlook one of the valleys near the Bernina Pass where you cross from the Engadine into Italy, I was tracking down two primulas, late as it was in mid-July, in the hope that a belated bloom or two might cross my path. The hope was, *mirabile dictu*, fulfilled. Satisfied, I commenced the descent across and down a limestone scree, devoid of all vegetation, that was far-flung from the base of the precipices to the edge of the valley stream hardly discernible far below. Amid this unlikely desolation I stumbled into a small patch of a dozen or so of the alpine columbine. I had failed a day or two previously to light upon the columbine in the entrancing (and to the flower lover doubly entrancing) woods that clothe the south side of the

Lake of Sils, and had been unimpressed by the withered blooms that still hung their weary heads in the "Alpine Garden" of Sils-Maria itself. The discovery, therefore, on a high bare scree, in inimitably superb form, of what the prophet of rock gardening called unquestionably the most beautiful plant of the European Alps, was the more unexpected. It then occurred to me that where there were a dozen it was most probable that others would be also; and looking around I descried on the far side of the scree a field of blue, so blue and such a field that in the succeeding days, when one knew where to look, the dark patch on the mountain side was visible from the train as it passed the valley mouth over a crow's mile away.

The field of blue consisted, indeed, of close-packed *Aquilegia alpina*, at the acme of its perfection—but a bud or two unopened, not a bloom yet flagging.

Lugubrious spirits at the Pontresina hotel had informed me that the Swiss soldiery stationed on this frontier during the war had dug up all the aquilegia in the Engadine (I could not think why; were they enraptured into attempted transplantation to their homes, or did they found my colony, near their outposts on the Pass?). A few plants, they said, might still be found in the woods at the base of the Roseg Glacier. To hearten these damp enthusiasts I collected a bouquet of a hundred or so spikes (only to be threatened with arrest by the Cantonal authorities for preventing the seeding of so rare a flower). Which done, I became cool enough for a cold calculation.

The completely blue patch—so blue as to hide at a few yards' distance the coarse white limestone blocks which were the strange compost of the presumably mossy wood-loving columbine—measured 44yds. long by 26yds. broad.



Allowing for a clear circle of 6ins. from stem to stem—though for the most part bloom touched bloom—there were in that patch over 40,000 spikes in full bloom; and nearly every spike (15ins. or 18ins. in height), carried three large flowers. The scree faced north. No other vegetation grew upon it. It was sheltered only from the grilling midday sun by the mountain ridge behind. It lay open to all the winds that blew.

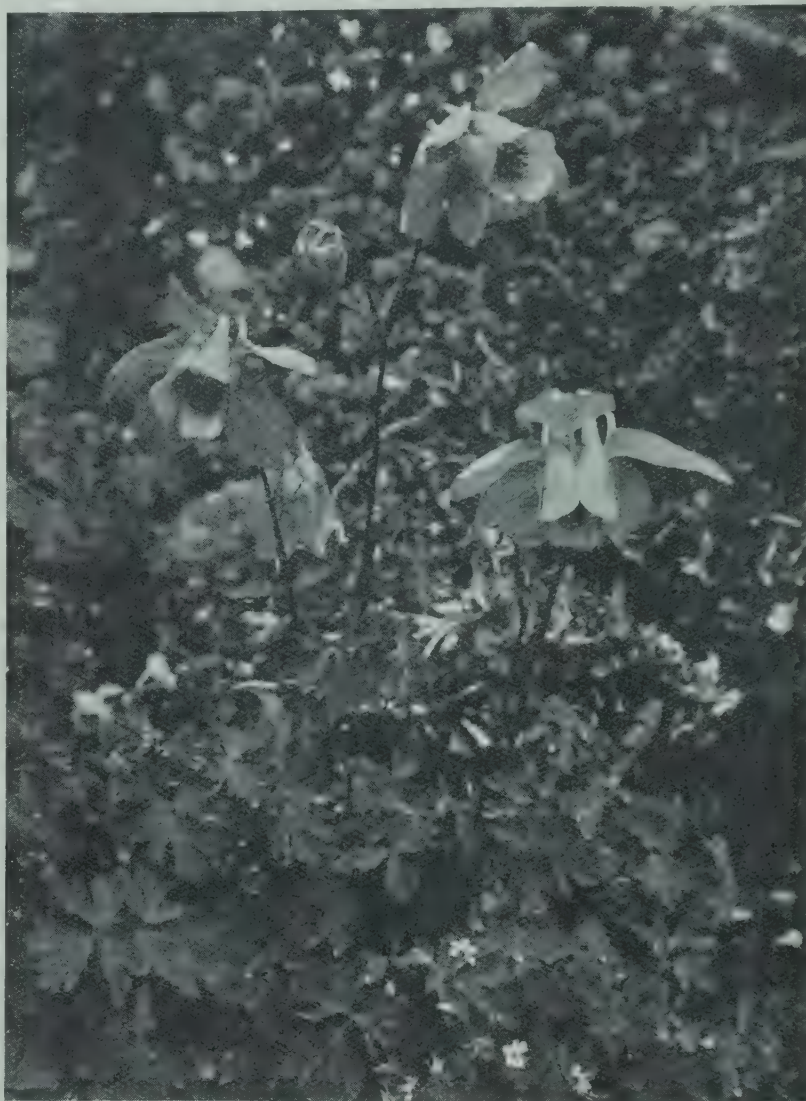
All records give *A. alpina* (as other aquilegias), as a woodland plant. The localities given are "rocky, bushy places," or "the lower light scrub of alpine woods." I read that the alpine columbines "lodge behind bushes on their native hills" and "dislike being battered by winds and weather when coming up." I am enjoined, if I wish to obtain the one—or two—year old plants that alone are worth collecting, to lay my length among the scrub and peer through the herbage, the older plants sending down through deep moss their intractable 2ft. stocks before the fibrous roots splay out. The authoritative prescription for cultivation—"very spongy rich woodland mixture never parched by sun or worried by wind"—is based on the essentially woodland nature of its best known habitat.

Cultivation in England has proved difficult. Mr. Farrer indeed found it not one of the most difficult, but needing care, especially in the south. He also found that it lost its size in cultivation, and its dazzling blue sank into a steely indigo. The only reliable course for the would-be grower is to collect seed or seedlings with his own hands. What would be the result of an unorthodox treatment based on its brilliance on an unorthodox bare scree? There, at least, the columbine silenced criticism. My collected bouquet lasted well in water, and the wild thought occurred: what a vogue *A. alpina* would have with the florists could anyone in England coax

it into the vigour, floriferousness and beauty of the Bernina colony.

When Mr. Lofthouse saw it (THE GARDEN, 1923, page 662), in its well known home on the south side of the Mont Cenis lake, the blue of its flowers

feel that the rarer *A. alpina* of the Bernese Oberland and the Valais is a trifle larger in flower, solidier in substance and more brilliant in the tone of its blue. . . . But pure sky blue? The blue of *A. alpina* is the deep, atmospheric blue on the mountains on a day of racing cloud.



THE SOFT CLEAR BLUE FLOWERS OF *AQUILEGIA ALPINA*.

did not come up to his expectation (though admittedly it was somewhat past its best). One had been led, he wrote, to expect a pure sky blue flower in place of the somewhat purplish blue flowers which he found. Purplish! Say rather a soft, clear, deep powder blue. But on the Mont Cenis Mr. Farrer could not resist a qualm as to its form. "Memory is proverbially an excitable thing," he wrote; "yet I cannot but

liant red—less flushed with saffron than croceum's orange cup. It is taller, larger in up-standing bloom, carries half a dozen resplendent chalicees on each stem to croceum's one or two, and is, in all, so robust as to suggest, not a varietal relationship, but the same plant in a form so vigorous as to be able to reproduce itself by means of the bulbils of the stem which the dwarfer, weaker, less resplendent croceum fails to materialise. . . .

E. ENEVER TODD.

## SNAPDRAGONS

**S**MALL wonder that antirrhinums are popular favourites for bedding and for massing in the foreground of the herbaceous border, for they possess an exceptional number of good points, every one of which is desirable in the plants used for a brilliant summer display. Sturdy and neat, yet not strictly formal, the plants require but little staking or tying except it be the tallest varieties when planted in wind-swept situations. Their hardihood and wonderful immunity from diseases and pests is no small recommendation, and their untiring energy in producing an

unbroken succession of flowers for twelve, thirteen and even fourteen weeks is in itself an all-sufficient reason for making great use of them wherever inexpensive occupants of large beds are required.

The custom is to classify antirrhinums in three groups—tall, intermediate and Tom Thumb—but their present-day character necessitates a re-arrangement, for we have real Tom Thumbs which make dense cushion-like plants only 6ins. high, dwarfs from 12ins. to 15ins., intermediates from 18ins. to 24ins., and tall varieties which grow from 2½ft. to 3½ft. The last named produce wonderful

spikes of bloom, and compare with lupins for stately effect. The intermediates are of all-round utility, the dwarfs being particularly well adapted for small beds or narrow borders, while the Tom Thumbs provide excellent material for edging large beds to give them a neat and pleasing finish.

Of this last section the colours available are yellow, crimson, rose and white, but of each of the other groups a wide range of colours is open to choice.

"Which is the best antirrhinum?" The question has frequently been asked, but there is no best except to those



whose judgment is biased by a special fondness for one colour and lack of appreciation for some other colour.

Yellow flowers appeal to many, but there are some who dislike yellow. Golden Gem is rich and bright, the habit of the plant being intermediate, seldom exceeding 1½ft. in height; but Yellow King is taller by a foot, very clear, and produces fine spikes. The height indicated is the result of quite ordinary cultivation. Growers for exhibition who feed liberally, and also disbud, produce very much taller spikes than 2½ft. About the tallest variety thus far is Monarch, and it is a very fine flower, deep velvety crimson, of splendid size and well set on strong, tapering stalks. Four feet is quite easily obtainable, and really well grown plants of good stock have beaten that by many inches. It may be remarked that such height is quite unnecessary in a bedding plant; admittedly that may be so, but often for the back of a border, for bold, outstanding groups at intervals, and for the back row vases of an exhibit, height, with corresponding massiveness in spike, is sometimes a distinct advantage.

Warrior is perhaps even deeper in colour than Monarch, and it also will grow about 3½ft. in fine style, the individual blossoms being very large, with a waved standard.

Among intermediates there is small need to go beyond a good stock of Empress for a crimson, but it needs to be a good stock, otherwise there may be some little erratic behaviour in regard to colour. Black Prince had a good run, but it is not really a first-rate flower, sears very quickly, and throws a large proportion of scrappy spikes. Its habit is somewhat spindly, and many growers have now discarded it.

Mrs. R. F. Felton is a brilliant flower of wonderful size and arresting colour, and as a scarlet self is very valuable. Its height is about 2ft., and habit is bushy and free. Dobbie's selected stock of coccinea is of bright colour, but the flowers are individually smaller than those of Mrs. R. F. Felton, which is one of Simpson's of Birmingham. The same firm has given us a fine variety in Appleby Matthews. The colour may be described as orange overlaying terracotta with a flush of yellow on the frill and a white tube. It belongs to the 2ft. intermediates, and is one of the popular tribe of flame-like varieties which are strikingly effective at a distance. Our Prince is of very similar character, except that it is tall and may outstrip the frequently eulogised Torchlight, which is another of the flame-coloured group.

Apricot and peach shades are of unique charm, and both Prima Donna and The Fawn hold their place in the popular affection, and deservedly so, for they are most delightful flowers, The Fawn being of beautiful shape as well as colour. A new variety of Simpson's is destined to make a strong assault upon the stronghold of these two favourites. It is slightly more pink in its shading, but apricot salmon conveys a good idea of its colour, and although nearly 2ft. in height, it is sturdy enough

to enable one to dispense with staking when it is massed in a bed.

In whites, Queen Victoria is a tall grower, Purity is a really good intermediate, and White Queen is serviceable where almost a dwarf (not much over a foot) is required.

There are many pink antirrhinums, but the majority of them have white tubes, and that is somewhat of a drawback in the lighter shades. There is, consequently, an assured welcome for Charm, a real pink self of capital quality. Gloria is a rich rose pink; and in carmine we have Carmine Queen, a beautiful intermediate, and Carmine King, a tall variety in the same colour.

This list by no means covers all the desirable antirrhinums, but Afterglow, Bonfire, Fascination, Sybil Eckford, Silver Queen and Maize Queen have so many times been described and, after all, the best effects are not usually obtainable by using too many colours in close companionship.

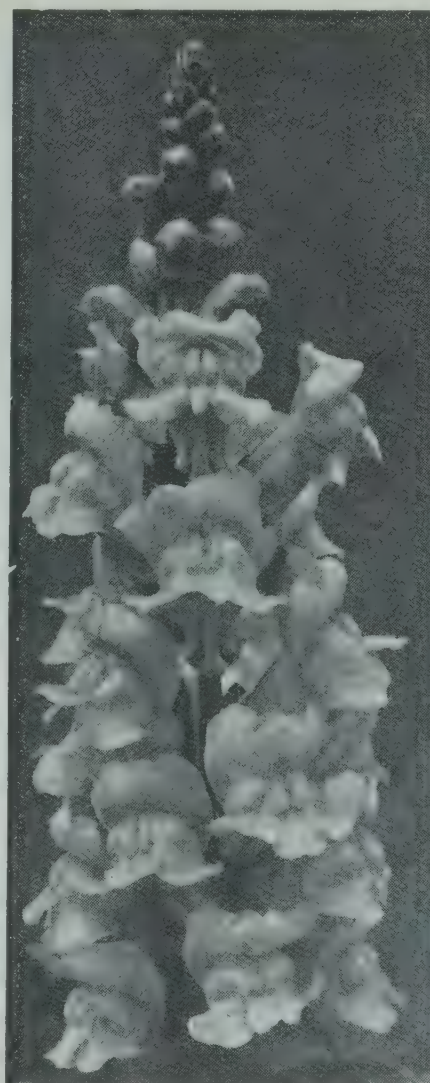
So far as planting is concerned, three points should be observed: afford ample room, plant with a trowel—not a dibber—and press the soil very firmly to the roots. The best results are obtainable when the soil has been well cultivated, deeply dug and well manured for a previous crop, but not freshly manured for the antirrhinums. Feeding may then be commenced in the form of surface dressings of a good guano or phosphatic manure as soon as the first signs of buds are noticeable.

It is much to the benefit of antirrhinums that the first spikes of bloom shall

be cut while young, and thenceforward throughout the season seed-pods should be sought and picked off daily. In preference to continuous watering a mulch of light, loose litter will be of great advantage during periods of drought, and as the season advances any plant which appears to be wavering should have its leading branches shortened back to induce fresh growths to break from the base.

The production of spikes for exhibition in cut flower classes involves a certain amount of pinching lateral growths. This should be done on the principle of "little and often," nipping out a few shoots here and there on a plant almost daily rather than severely reducing the growths in one operation, the latter course having a tendency to cause fasciation and irregularity of development through too sudden a diversion of sap through the few remaining channels.

There can be no doubt that for good bold effects in "group" exhibits nothing beats lifting whole plants and wrapping their roots in moss, as this enables the natural character of the plant and its foliage as well as flowers to be displayed. For such exhibits pinching or disbudding is unnecessary and undesirable, for the quantity of bloom will create a better effect than fewer long spikes can do. Before the plants are lifted the ground should be thoroughly drenched, then allowed to drain for a few hours, and after the roots are wrapped get the moss-balls into a shallow tank of water for an hour, and the plants will be good for a two or even three days' show.



PRIMA DONNA.



A GOOD SPIKE OF CRIMSON GLOW.



# PRUHONICE, THE FAMOUS PARK IN BOHEMIA

AS ONE OF THE LARGEST OF MODERN PARKS, PRUHONICE RANKS HIGH FOR ITS VARIATION OF CHARMING NATURAL SCENERY CREATED FROM MODERN IDEAS OF LANDSCAPE DESIGN, AND ALSO FOR THE FINE COLLECTION OF TREES, SHRUBS AND ALPINES.

THE best-known representative of a naturalistic style of landscape designer in Central Europe is Prince Pückler-Muskau. During his frequent and long visits to England at the beginning of the last century he became deeply impressed with the landscape style used at this period, and especially with the classical works of Repton. On his large estate at Muskau on the Neisse, in a rather poor part of Germany called the Lausitz, a little north of the large town

the English Garden at Munich, and Prince Pückler did for a more rational development of landscape gardening in Germany. Pückler's work at Muskau is still well preserved. The place now belongs to Count Arnim, who, with the assistance of Mr. R. Lauche, takes the greatest care of it.

But, after all, Muskau does not and cannot show the German ideas of a park of the twentieth century. Those modern ideas of a naturalistic scheme of park design are, in my opinion,

best represented by the work of Count Ernst Silva Tarouca at Pruhonice, near Prague, in Bohemia. This famous park, of which the young Czechoslovak Republic ought to be very proud, is still too little known even in Germany and in England. Count Silva is a born artist with regard to landscape design. As the owner of a great estate he commenced his work in 1888 without any knowledge of the great English parks, or even the work of Prince Pückler. He was an enthusiastic sportsman, and on his hunting trips he became well acquainted with natural scenery, and with the trees and flowers of Central Europe. On his own grounds he found everything he needed to develop and create landscape effects in the grand manner. Nature's striking examples did, however, serve him as inspiration. He was sensitive enough to feel what characters were latent in the natural scenes with their hidden beauties on which he was called to work.

Nobody who goes by train or car from Prague to Pruhonice expects to find there a landscape of great natural beauty. The country is rather flat, and covered with well kept fields, indicating a rich, heavy soil—an ideal place for farming. Even after his arrival at the small village of Pruhonice the traveller sees almost no sign of a large park. But as soon as he steps into the court on the southern side of the castle a great surprise waits for him. The first of a sequence of grand landscape scenes opens upon him. Its real grandeur cannot be shown through the medium of a photograph, but, nevertheless, the illustrations give a rather good idea of the character of the landscape with the pond in the foreground about 60ft. below.

The whole park at Pruhonice forms a series of valleys surrounded by wooded slopes with wide, green lawns and several ponds of different size connected by a small rivulet. These form each for itself a natural scene of a distinct character which has been carefully studied by Count Silva in order to

treat them in a way to give each a definite individuality, to develop each important view as a pictorial composition. Pruhonice, in consequence of its more individualistic treatment, is very different from Muskau. To a very great extent Count Silva has, at least in certain parts of his park, made use of foreign trees and shrubs, while Prince Pückler scarcely planted anything else than the trees common to Central Europe.

The formation of certain landscape scenes by means of trees from parts of the northern temperate zone other than Europe is often to be met with in our parks, but seldom is it attempted on such a large scale. Most of the plantings are still too young to show the real effect the artist is trying for. One scene especially is very promising. A very large deep



VIEW FROM THE CASTLE TO THE SOUTH OVER THE "SCHLOFSTEICH."



ONE OF THE BEST VISTAS, WITH SILVER POPLARS FORMING THE FOREGROUND.

of Görlitz, he, in 1815, started to carry into effect the impressions he received in England. But he was in no way an imitator; he was a great but somewhat queer personality of a high artistic standing. As his little booklet, "Andeutungen über Landschaftsgärtnerei," clearly shows, he had "a conception of naturalistic design which worthily matched the work of Repton and Price." He was not the first and only one who accepted the ideas of landscape creation of the end of the eighteenth century. C. C. L. Hirschfeld in his fairly comprehensive work on the theory of landscape design (1779-85) had already preached this gospel. He was the real pupil of Pope and Brown, and his book is full of the romantic schemes of his time. What Repton did in England, Sckell, the creator of



pond is surrounded by rather steep slopes. Those facing south form an imposing natural rock garden quite different from the one near the castle mentioned later. The rocks are rather barren, and it proved almost impossible to start plant growth on them. Nevertheless, large groups of *Picea pungens*, *Abies concolor* and *Pinus austriaca* are slowly growing up, while in the rich bottomland on the shores of the pond Douglas firs, Engelmann spruces and other North American and Asiatic conifers thrive luxuriantly. The same is the case with the conifers planted on the slopes facing north. I saw them first almost twenty years ago, and on every new visit to Pruhonice I am surprised how quickly those firs, spruces, pines and arbor-vitæ and cypresses are growing. About ten years from now one may be able to give a good impression of this scene even on a photograph.

The variation of the natural scenes at Pruhonice is one of the great features of this park. I cannot describe or even mention them in detail. Some of them I shall, however, point out. Beneath the castle, which has been built by the owner on the foundations of an old one, a large, picturesque, natural rock stretches itself for half a mile along the eastern side of the pond. Our picture shows a small part of this immense rockery which once comprised the richest collection of alpine plants on the Continent. Unfortunately, since the war most of the finest plants have been lost. Count Silva has been absent from his place for years, and at present he has not means at his command to keep up the rock garden as he used to. It was once his main hobby, and he could really be proud of it. Only the hardiest ones survive, and it is really astonishing how many plants have become almost naturalised. There are, for instance, still large patches of several *acæna*, like *argentea* or *Buchananii*; even *acantholimon* species stood the hardships well. *Alyssum argenteum*, of course, and some *androsace*, and *Anthemis Aizoon*, *Arabis alpina*, *Armeria cæspitosa*, various *aubrietias* and *campanulas*, *Cerastium Biebersteinii* and some nice *dianthus* hardly need any care. Besides these one still frequently meets between the rocks such species as *Draba aizoides*, *Erodium Manescavi*, *Geranium lancastriense*, *Geum coccineum*, *Horminum pyrenaicum*, *Leontopodium alpinum*, *Lithospermum purpureo-cæruleum*, *Matthiola vallesiaca*, *Phyteuma campanuloides*, a good many *primulas*, *Satureia montana*, *Saponaria ocymoides*, *Saxifragas Elizabethæ*, *longifolia*, *marginata*, *muscoïdes* and *sancta*, species of *sedum* and *sempervivum*, *Thymus serpyllum*, *Townsendia Wilcoxiana*, *Veronicas argentea* and *gentianoides*. A good many interesting dwarf shrubs have found convenient sheltered places among the rocks. *Rhododendron yedoense* and several of the Chinese species related to *intricatum* are growing freely. Also some of the larger types, such as *R. Smirnowii*, and of course, all the European species and their hybrids. Many evergreen forms of Chinese *cotoneasters* form broad clumps, covered with their beautiful red fruits for many months, as, for instance, *C. Dammeri*, *C. adpressa* and some forms not yet identified botanically, of which I sent the seeds from north-western Yunnan ten years ago.

The collection of foreign trees and shrubs at Pruhonice is very large. In almost every part of the big area where a suitable place could be found rare plants have been placed. A few years ago Count Tarouca commenced a big evergreen plantation of rare conifers and a great many broad-leaved species. Most of them survived the long and severe winter of 1923 to 1924 without any real damage. *Viburnum rhytidophyllum*, *V. utile*, *Berberis Julianæ*, *B. Gagnepainii*, *B. Hookeri*, *Stranvæsia Davidiana*, several forms of *skimmia*, a great many fine varieties of *Ilex Aquifolium*, *Pyracantha angustifolia*, *Photinia glabra*, *Phillyrea decora*, *Daphniphyllum macropodum*, *Cistus laurifolius*, and even such plants as *Corokia* *Cotoneaster*, *Castanopsis chrysophylla* and *Trochodendron aralioides* seem to do well, but are still too young to judge of their real hardiness. *Prunus Laurocerasus schipkænsis*, *kalmia*, *Lonicera pileata*, and such half-evergreens as *Quercus pseudo-turneri*, *kœhnei*, and also the forms of the hybrid *Q. hispanica* known as *Lucombeana* and *fulhamensis* are quite hardy.

But, after all, the most important feature of Pruhonice is its artistic value. It is our largest modern park, covering a surface of more than 500 acres, and I do not think that there is even in England a modern creation of landscape design of equal artistic value. The park needs, of course, ten to twenty years more to develop fully its most characteristic scenes; and it is, therefore, a great pity that under the prevailing



THE CASTLE SEEN FROM THE SOUTH - WEST.



THE LARGE PICTURESQUE AND NATURAL ROCK GARDEN WHICH CONTAINS A RICH COLLECTION OF ALPINE PLANTS.



circumstances it may never become finished. If Count Silva cannot do it out of his own means the Government ought to take it over as a national park and to provide the necessary money for its upkeep and finish. The Czechoslovaks are a garden-loving people. Pruhonice is not far from their capital,

and it ought to become a well kept public park, and not to be allowed to fall to decay if it cannot be kept and finished by its owner. It is always difficult to preserve such great living works of landscape art, but they are among the most precious treasures a country can have.

CAMILLO SCHNEIDER.

## THE MANURE PROBLEM

### PROPRIETARY BRANDS OF FERTILISERS.

WHEN study has so far advanced that a tolerably clear idea of the requirements of plants has been acquired, there still remains the difficult question of ascertaining what are the important deficiencies in the soil with which we have to deal. The knowledge that plants require potash, nitrogen, phosphoric acid, lime, etc., is helpful to a point, and supplemented with the information that nitrate of soda and sulphate of ammonia are rich in nitrogen, that sulphate of potash is the best form in which to apply potash, and that one chemical is adapted for light sandy soils and another for clay, we have a combination of facts at our finger tips which, theoretically, should make us expert plant feeders. In point of fact, however, there is every possibility of going grievously astray unless the soil to be dealt with is so thoroughly understood that the required chemicals can be applied in a proportion that will make up the deficiency without an unbalancing effect upon the existing properties in the soil.

Reliance upon soil analysis may be wise or otherwise, but there is a tremendous risk that the report upon a few pounds of soil taken in handfuls from various parts of a garden will bear very small resemblance to the actual chemical character of the garden as a rooting medium for plants and crops. Analysis of a single small sample of soil should therefore seldom be considered sufficient reason for putting implicit faith in the capability of a heavy dressing of this chemical or that. As a matter of fact, it is the rule rather than the exception that one chemical fertiliser should be supported or followed by another.

The commercial grower with large acreage may economically and with advantage utilise chemicals separately and individually, but all things considered it is of greater advantage to the private gardener and amateur to use a compound fertiliser or a manure of more or less complete character.

There is always this advantage in a proprietary fertiliser—it is blended in a proper manner by a firm possessing all the equipment necessary to test the quality of the component parts and to blend them thoroughly. The production of such fertilisers is the work of fully qualified chemists; it has to be, for no inferior and unreliable brand of garden fertiliser can for any length of time endure in face of competition as keen as can be matched by any commodity in trade. That the range of fertilisers on offer to the public is of bewildering extent is itself high testimony to their

quality, for a poor and unsatisfactory brand would speedily be elbowed off the market by the crowd of tested and tried fertilisers that have an established reputation.

Not all proprietary fertilisers are equally adapted for every purpose. There are certain brands I have used intermittently for a period of three dozen years, and within that time I have cultivated many gardens of widely differing character, and in some cases the the fertilisers I like best have had to stand aside in favour of others which were better suited to the particular requirements of the gardens concerned. The question of humus must always be carefully considered; and, on the one hand, a harsh, brashy or gravelly soil, or, on the other hand, a stiff, stubborn clay, require a bulky vegetable or even animal-refuse compound rather than a concentrated chemical preparation.

Hop manure is of very great value on gravel, chalk, clay or dry sand, especially where stable manure is scarce. Wakeley's is a well known name in connection with hop manure, and as this particular brand is reinforced with useful chemicals it is of sound value and great utility.

Other good hop manures are on the market, the famous firm of Abol, Limited, have a good line of their own. Maskell's is another, and other names might be added, but my purpose is not to advertise makers but rather to indicate the particular purposes for which different kinds of proprietary manures are suitable. Hop manure would not be my choice for an old black-soiled garden already surcharged with humus, but new gardens and those where the soil is of a "hungry" character are greatly benefited by it.

Fish and meat meal manures are also good for new and somewhat dry soils. The Humber Fishing and Fish Manure Co., produce a capital manure, and Messrs. Robinson Bros., Limited, West Bromwich, manufacture a fertiliser which contains a large proportion of animal fat and bone which is of lasting value.

Wool waste, combined with dried and pulverised sheep's manure, makes a rich, quick acting yet long-standing soil enricher, for the particles of wool not only themselves contain valuable properties, but are also of sufficiently absorbent character to take up, and hold the properties of the actual manure as they dissolve. Wellson's plant food is a compound of this character prepared by efficient grinding and mixing machines, and consistently turned out to a high standard of excellence. Messrs. Willis Bros., Harpenden, also handle wool

waste products, which are extremely useful for opening up stubborn clay soil, or improving the moisture-holding powers of a stony sand.

Quite a large number of flowering plants, as well as the root crops among vegetables, like a good, rich soil, but are not improved by being transplanted (or sown in the case of seeds) in freshly manured soil. On this account it is frequently desirable to apply fertilisers at the time of autumn digging, that they may lose their "fire" before the roots come in direct contact with them. Rapidly soluble chemicals cannot economically be buried in soil which is to lie vacant throughout winter and early spring, but here again manufacturers come to our aid with preparations which are admirably adapted for the purpose. Stonehouse "Soil Enricher," Robinson Bros.' "Multiple," H. P. Tripps' "Triple" Fertiliser, Bull's Plant Food, Abol Horticultural Fertiliser, native guano, various brands of blood and bone manure, dried sewage, and the hoof and horn fertilisers belong to this class, being highly nutritious, for the most part gradual in their pace of conversion or solubility, and in all respects suitable for enrichment of soils which are well supplied with humus, but require replenishment of phosphates, potash, and a slowly soluble form of nitrogen.

Thus far, the point of consideration has been the improvement of the soil in regard to its stores of staple plant foods, all the substances referred to or indicated being suitable for digging in, either in autumn or early spring. Not half of the fertilisers of this character have been individually named, but it will be found that such firms as G. H. Richards, Casein Products, The Key Fertiliser Co., Briton Ferry Chemical and Manure Works, Lawes' Chemical Manure Co., The Acme Chemical Co., Garden Supplies, Limited, H. Richardson and Co., and still other firms have among their brands one or more which by general usage rather than scientific accuracy, are termed organic fertilisers, and these are the kinds for digging in, and provided a choice is made with due regard to whether or not the soil requires humus, safety and satisfaction are pretty sure.

There still remains the very important problem of selection of tonics and stimulants to be applied during the height of the productive season either in the form of dry top-dressings or as liquid manure.

For pot plants, the most convenient and economical method of applying tonics is that of watering. Top-dressing big batches of plants in pots with



spoonfuls of powder is an irksome task, while there is always the danger that at the next watering too much of the undissolved chemicals will be washed to the crowns or stems of the plants to do mischief. In the case of beds, borders, vegetable quarters, etc., it is frequently safer periodically to top-dress with dry fertiliser and hoe it in; the hoeing always benefits, and on the other hand, watering big areas is a risky business to start upon, because intermittent watering during prolonged drought is detrimental rather than beneficial, and regular watering may be too great an undertaking. A limited quantity of liquid fertiliser is inadequate moisture for the soil, and a thorough soaking may easily dilute the fertiliser to such an extent that its benefits are nullified.

Numerous as the highly concentrated fertilisers for the purpose under present consideration may be, there are some which have stood the test of time, and have survived the continuous bombardment of competitive lines, the names of such scarcely need mention except by way of appreciative compliment. Clay's Fertiliser, Ichthemic Guano, Canary Guano, Thomson's Manure, require no eulogy; they have been life-long help-mates. There are, nevertheless, various

brands which are of comparatively recent introduction, but which have to their undoubted credit the solid fact that they have made progress, sufficient proof in itself that they are good; else they, like some others, the names of which it is not worth while to recall, would have gone under, after brief but futile assaults upon the strongholds of the aforementioned old servants. Carmona, Abunda, and other names occur to mind, and the results of their use are pleasing, while still the numbers grow, and new firms enter the field: Casein Products, Plantora, Key Fertilisers, Briton Ferry, Vickers, being names of recently acquired and growing reputation. The question is sometimes asked whether this multitude of proprietary fertilisers is really required; my answer is that their continued existence proves their need and utility, for in the severity of present-day competition, the unwanted and the incompetent cannot stand.

The wide range of fertilisers is a boon to the grower, because it provides easy means of varying the menu for his plants and crops, and rest assured, however pleasing the results of a certain fertiliser may be, there comes a time when plants and soil benefit by a change, and the wise cultivator is observant of that fact.

For my part, even in a single season, I should prefer to use two kinds of fertilisers at intervals, than adhere to one the whole season through.

Plant feeding and soil enriching is an intricate problem, requiring an immense amount of study. Manufacturers have helped greatly by compounding well balanced fertilisers, but there is yet a possibility open to those who possess the necessary scientific knowledge, to help still further by telling candidly for what particular purposes and soils their individual brands are most serviceable. We fully realise the aim of the manufacturer is to sell, and not to narrow the limits of his market by quoting the minimum of serviceability of his productions, but the grower has learned just enough to know that different soils, different plants and crops, and different seasons of the year require different kinds of manures or fertilisers, and rather than narrow down the sphere of utility the manufacturer will foster increased demand by guiding the user in the difficult matter of using a particular fertiliser for a particular purpose. That will make for progress, while the claim of all to be competent for all purposes tends to bewilder if it does not actually mislead.

L. I. ATRIS.

## DEAR HARBINGER

BY HALLIWELL SUTCLIFFE.

SHE is almost due, gowned in the lilac mauve beloved of old-time gentlewomen. Some name her the Chinese primula, others the Cashmere primrose. The wise, book-

learned men have a Latin name for her, which I forget with great patience every time I hear it. She is, as the Dale counts matters, a new-comer in our midst. She has not been settled here, that is, for as long as three hundred years or over. But she knows all about us, because she finds the same limestone highlands that she has known for centuries untold. Sometimes I fancy she smiles tolerantly as she listens to the gnarled yew trees in the garden, and hears them boast that they were here when Senlac Field was lost and won. In the far-off land of her ancestry the trees whispered o' nights of emperors whose dynasty was old when Senlac's warriors were binding the raw wounds of battle.

This dear harbinger of flower-tide is pushing up the crowns of bloom that soon will make witchery of our garden ways. Snowdrops and aconites have sent their banners out against the winter's spite. Soon the Cashmere primrose will carry the blithe standard forward.

"Harbinger" she is to me, and, I fancy, if she were asked, that she would admit my right to give her a pet name of my own. Many years have passed since a village schoolmaster higher up the Dale gave me my first root. Since then I have been constant to her service, until now you are never sure in what odd nook and corner a clump of mauve blossom may

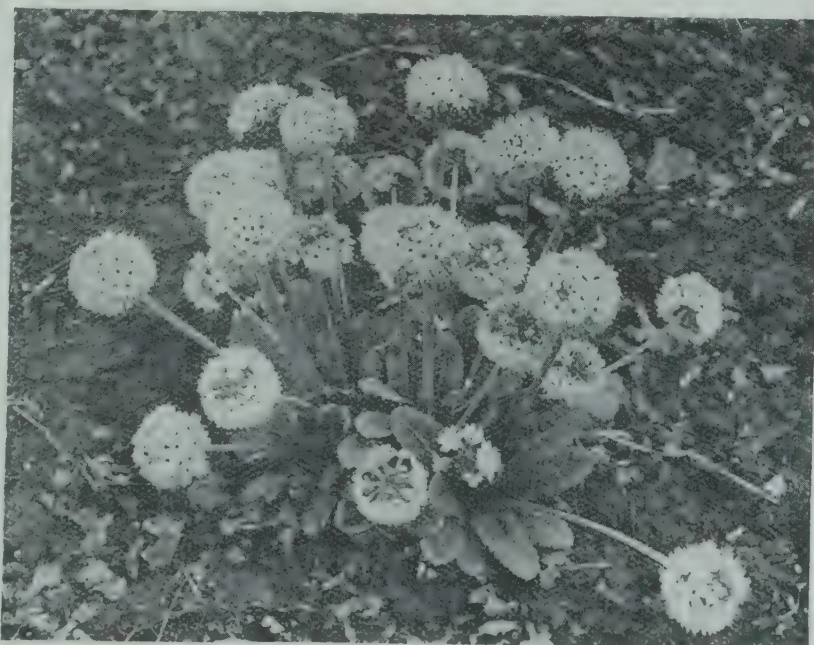
shine through the nipping east wind days. "Plants, like humans, know when you love them," an old gardener said to me one day; "and, once they know that, you can do almost anything with them."

That has been my experience of Harbinger. I have planted her in the wind-swept open, in the little strip of woodland by the stream; and in shade or sun she thrives, eager to humour my caprices. Like all courageous optimists, she is apt to think the best of those subtly treacherous days that come in mid-December, when warm airs blow and gnats come out of their crannies. For this reason the safest quarters for her are in positions slightly sheltered, but not too secluded from nip of the pessimist winds that check her hopefulness.

Harbinger loves to be tucked up in limestone pockets with moistish soil for her feet; and that is fortunate, for the round heads of bloom, showing against

the soft greys of the stone, have a beauty not to be described by any pen.

A true-hearted gardener must always have something of the evangelist about him. In all the years that Harbinger and I have shared, I can remember no one who, seeing her in full bridal dress, has failed to yield instantly to her strange, appealing charm. She is, in some deep sense of the word, a mystic flower, and lays a happy spell on men. She is, too, a this world's creature, brave and buoyant though winter whistles down the steep. And that is why one would like more folk to be acquainted with Dear Harbinger.



A FREE FLOWERING CLUMP OF THE CASHMERE PRIMROSE.



## THE LONDON DAFFODIL SHOW

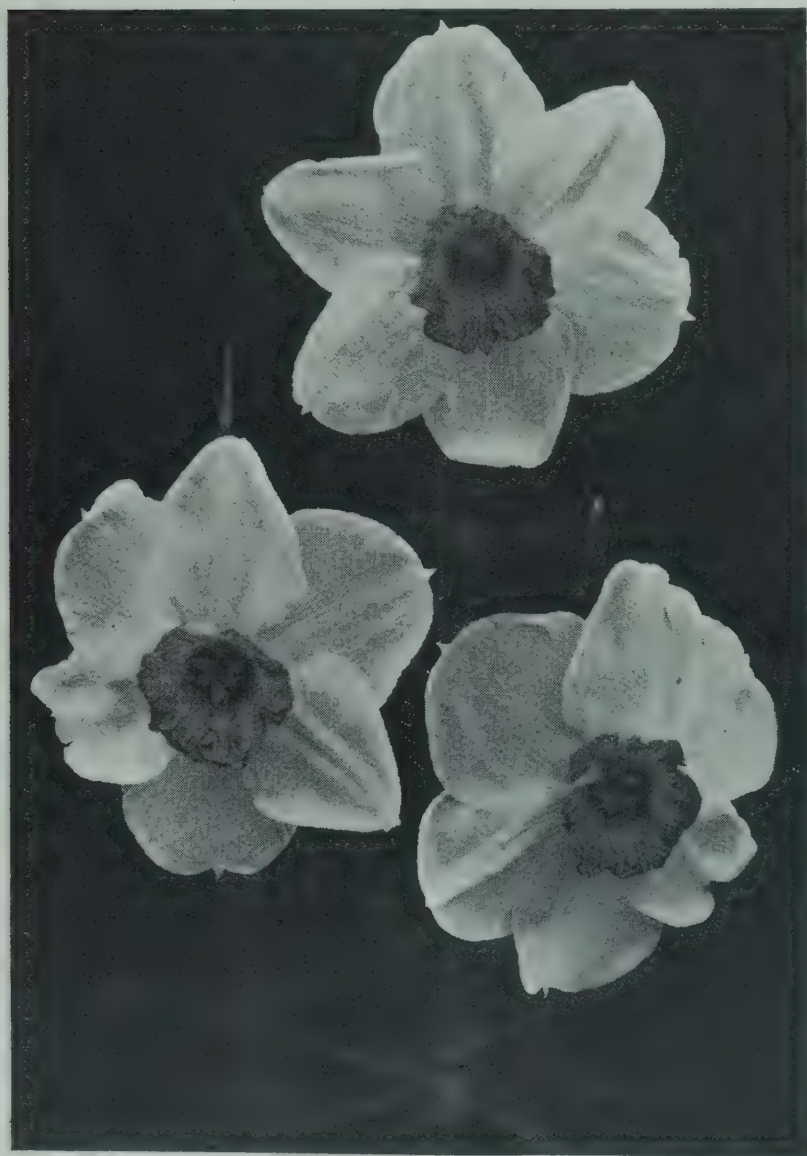
WHEN attending a flower show, and particularly a special flower show such as that under notice, we usually endeavour to place ourselves in the position of a flower lover visiting such a show for the first time or, at least, after a considerable interval. On April 15th and 16th the first impressions of such a person must have been disappointing, as, immediately on entering the Royal Horticultural Society's Hall at Vincent Square, primroses and polyanthus met the eye—excellent flowers and worthy of unstinted admiration; but they were not daffodils—immediately above and beyond the primroses were carnations, lovely fragrant carnations, but still no proper substitute for daffodils. Having rounded the corner of primroses and carnations, so to speak, one was confronted with beggarly empty tables.

Messrs. Barr and Sons staged over two hundred distinct varieties in goodly vases. The dainty little flowers of Silver Cycle did not find favour with the committee, but were greatly admired in the collection. Besides its grace and charm of form, it is the first cyclamineus bicolor hybrid that they have shown. Warwick, a yellow trumpet; Nereus, a somewhat similar bloom but of richer colouring, with a widely open, frilled tube; Basilia, of similar form but lovely primrose yellow; Fiery Monarch, a large incomparabilis with a brilliant corona; and St. Olaf, a starry Leedsii of delicate beauty, are the names of only a few of the delightful sorts to be seen. But lovely as these were, they were equalled and at times surpassed by some of the unnamed seedlings. The large Barrii flowers, both with white and with

while in the centre of the group there was a vase of the splendid Fortune, a large incomparabilis with a yellow perianth and lovely orange corona.

Bath's Flame, a Barrii variety with a cupped, red-rimmed corona, was the outstanding sort in the collection of Messrs. R. H. Bath, Limited. Lord Kitchener, with a pale primrose tube; The Marquis, Dominion, Golden Goblet and Early Gold, four rich yellow trumpets; with Buttermilk and Inglescombe, doubles, were also of great merit.

High quality was fully evidenced in a large collection arranged by Messrs. J. R. Pearson and Sons; while the grouping of a few selected varieties was an agreeable change from the conventional method. The massed blooms of Marshlight, Brilliancy and Sunrise were



N. LADY DIANA MANNERS, AN EXCELLENT BARRII VARIETY.



THE TWIN-FLOWERED TAZETTA, N. KINGCROFT.

Then one saw the glorious arrays of daffodils of all possible forms and colouring so generously displayed by the chief trade growers, and realised that, after all, it really was a daffodil show.

Although it was, nominally, a competitive show, these wonderful groups of cut blooms were, as so often happens, the making of the show, and no praise can be too high for them. The high quality can be assessed from the fact that four gold medals were awarded. The recipients were Messrs. Barr and Sons, Messrs. R. H. Bath, Limited, Mr. J. L. Richardson, and the Donard Nursery Company. A whole number of THE GARDEN might be filled with appreciations and descriptions of the thousands of admirable blooms which made up these monster exhibits.

yellow perianths, were wondrously beautiful.

The large trumpet daffodils shown by Mr. J. L. Richardson included Ivorine, Goldbeater, Master Robert, Sergeant Murphy, Michael and Loyalist, the first a white variety and the remainder of rich yellow shades. Queen of the North and White Star are two of his best Leedsii, while Firetail and Cræsus of the Barrii section possessed brilliant coronas.

In the Donard collection it was such as Eskimo, Silver Fox, Tenedos, Everest, Lady Sackville and Phantasy, in pure white or sulphur shade; and Gog, Magog and March Wind, of deep yellow colour, among the trumpet daffodils that attracted first attention. For brilliance of colouring, Cræsus, Carnival, Dosoris and Sunrise were excellent;

delightful. Other sorts which attracted special attention were Moira O'Neill a bicolor trumpet with a primrose tube; Sanctity, a pendulous white trumpet; Fairy, yellow; Bernardino, Potentate and Thorkel, Barrii varieties; and, in The Pearl and Argent, two fine doubles.

Sarchedon, shown by Mr. J. W. Barr, was the finest poeticus variety in the Show. Alope, a large trumpet with a deep primrose perianth and richer tube, possesses great charm; St. Hilda, yellow trumpet; St. Hywin, a giant Leedsii with an attractive frilled corona; Treserve, a gigantic yellow trumpet; and Silver Fleece, are the names of a few of his novelties.

Smaller but interesting collections were contributed by Messrs. Cartwright and



Goodwin, 'The Welsh Bulb Fields, Mr. W. F. M. Copeland, Mr. W. D. Fownes, and Mr. Thornton.

With very few exceptions the competitive classes did not induce many exhibits as might have been expected. In the open classes which required three blooms each of twelve varieties, Mr. J. L. Richardson and the Donard Nursery Company were awarded two first prizes. The latter's yellow trumpets were particularly good. The chief varieties were Clarion, Grenadier and Gorgeous. In this class Mr. Richardson and Mr. F. H. Chapman were placed equal second. Of Mr. Richardson's first prize blooms, Orange Glow, Brightness, The President (*incomparabilis*), Firetail, Queen of Hearts, Crimson Braid (*Barrii*), were the best.

In the next classes, requiring three blooms each of six varieties, Mr. Richardson won six first prizes with splendid vases of such sorts as White Dame, Atalanta (white trumpets), Mrs. W. Christie Miller (bicolor trumpet), Orange Glow, Brightness (yellow *incomparabilis*), Pedestal, The President (bicolor *incomparabilis*), Queen of Hearts, Lady Moore (bicolor *Barrii*), Irish Peach, Tenedos (large *Leedsii*). Mr. Chapman, whose best were Ossa, Formidable and Yukon, was first with yellow trumpets. Showing six seedlings, Mr. Copeland was first with Triandrus and with Oranges and Lemons, Meringues and Irene Copeland, was equally successful with doubles.

The open classes for new varieties were the most successful in the Show. The premier prize was won by Mr. P. D. Williams, with twelve magnificent varieties, which included St. Agnes, a giant *Leedsii* with a delightful crested rim to the corona; Kilter, a brilliant *Barrii*; Theodore, a bicolor *Barrii*; and some excellent seedlings. Dr. N. Y. Lower, who was second, included in John Peel, a lovely *Barrii* with a pink sheen on the perianth and a reddish orange corona. Beauty of Radnor and Rewa were also of great merit. In the class for six varieties, also raised by

the exhibitor, the Rev. A. R. Meyer was first with unnamed seedlings; and the Rev. G. T. Pearce was second. The best three shown by the Donard Nursery Company were also unnamed.

Mr. P. D. Williams won the first prize in the very strong class for twelve varieties not in commerce. Here he included magnificent vases of Kilter, Nelly and Kenegie (*Barrii*), and Miriam, a sulphur yellow trumpet. Mr. Richardson, who was second, showed the rich yellow trumpet, Golden Ingot, and Sunset Glow, a brilliant *Barrii*. The Rev. H. R. Meyer had the best six and Mr. Copeland the best three varieties; while Major Churcher was first in the novices' class.

The classes for single blooms of the different sections or sub-sections were generally well filled. Mr. P. D. Williams and Mr. Richardson were first in four classes. Mr. Watts was first in two, and Mr. W. Welshman, Mr. Copeland and the Donard Nursery Company each won a first prize.

The amateurs' classes were poorly represented. Miss K. M. Hinchliff, Worlington House, Instow, was the chief exhibitor in the first section; and in the other, the Rev. G. Pearce, Creed Rectory, Granpound, Cornwall, won most of the first prizes, Miss Violet Warren, The Quinta, Canterbury, was first in two classes.

The three bowls of daffodils were poor attempts, and no one seemed to exhibit a basket of blooms.

#### NEW DAFFODILS.

BEERSHEBA.—This is a large, white trumpet daffodil of substantial make and a long tube lined to the base with a suggestion of yellow at the junction with the perianth. Award of merit. Shown by Mr. J. L. Richardson.

DAWSON CITY.—A handsome yellow trumpet daffodil. The perianth is shapely and the cylindrical tube is exceptionally long. Award of merit. Shown by Messrs. R. H. Bath, Limited.

FANNY CURREY.—A delicately beautiful giant *Leedsii* bloom of paper white colour. The widely expanded, frilled corona is prettily fringed with pink. As only three blooms were shown, an award of merit could not be granted. Preliminary commendation. Shown by Mr. J. L. Richardson.

HADES.—The application of this name is not readily apparent. It is, however, a beautiful *Barrii* variety. The large star-shaped perianth is of pale primrose colour and the basin-shaped corona is a deep cardinal. Preliminary commendation. Shown by Mr. J. L. Richardson.

JUBILANT.—This is a magnificent giant *incomparabilis* variety. The perianth is rich yellow and the large tube is a deeper shade of the same colour. Award of merit. Shown by Mr. P. D. Williams.

KINGCROFT.—This was certainly one of the best novelties in the Show. It is a twin-flowered tazetta bearing blooms the size of a small pheasant's eye narcissus. The perfectly round perianth is white, and the regular corona is a bright orange. The blooms are sweetly scented. Award of merit. Shown by Mr. P. D. Williams.

LADY DIANA MANNERS.—We are inclined to the opinion that this was the best *Barrii* variety with a white perianth in the Show. The blooms are large, perfectly round and possess exceptional substance. The broad corona is of deep yellow colour, heavily margined with fiery orange. It is recommended for garden decoration and for market purposes. Award of merit. Shown by Messrs. J. E. White and Sons.

YELLOW JACKET.—There were several varieties among the eighteen before the committee which we should have expected to receive an award in preference to this. Opinions were divided as to which division it should be placed in, and with reason. It is a small self yellow flower with a poor type perianth and neat little corona, which seems to belong to the *Barrii* division. Award of merit. Shown by Mr. C. A. Jardine.

## THE INTERNATIONAL SHOW AT HAARLEM

IN the grounds of Groenendaal Park in the small and quaint village of Heemstede, near Haarlem, is laid out one of the most magnificent flower shows in perfectly natural and charming surroundings. Over forty acres of what was formerly woodland pasture, with gentle undulating slopes broken at intervals by the windings of tiny streams, have been planted with spring flowers. It is fifteen years since the last great international exhibition at Haarlem, and 1910 has been easily eclipsed by the present one. Within these years enormous changes have taken place in horticulture throughout the world, with the introduction of new plants, and it is one of the main purposes of the Show that it exists for the study of the many new species and varieties that have entered the bulb world during that period. In addition one realises how little Dutch horticulture has to learn in connection with bulb growing. Over 2,500,000 bulbs were planted in the area last autumn, and the mass of bloom this spring stands as testimony to the enterprise and skill of the many Dutch firms engaged in the industry.

In front of the spacious exhibition hall, wherein are being held special shows of flowers and shrubs in season, are laid out numerous beds of narcissi, tulips and hyacinths. The method of planting these beds may be noted *en passant*. The beds are well filled, yet the individuality of each plant is retained. The spacing is such that the foliage has a sufficiency of room to carry out the necessary life processes of the plant. Throughout the whole lay-out of the exhibition one meets these beds at

every turn, providing an array of bloom and a perfect kaleidoscopic effect in colour which would be difficult to equal. Whites, yellows, blues of all shades, and reds of the tulips and hyacinths, combined with the yellow heads of the daffodils nodding and dancing on their long stems, peeping from a mass of light green foliage, produce a blend of colour which the artist would find exceedingly difficult to portray. Holland well deserves its name as "The Garden of Europe," for truly no other country can produce such a wealth of bloom and colour in April and May as the land of the dykes and windmills.

In addition to beds containing hyacinths there is a number filled with shrubs. The planting of the latter has been largely carried out by the firm of W. Keessen and Sons, "Terra Nova," Aalsmeer. The collection is a representative one containing cotoneasters, berberises, osmanthus, viburnums, sträværias, etc., all of which appear to thrive exceedingly in the sandy soil. One bed close by calls for a word of praise, containing well fruited specimens of *Ilex pyramidalis*, which lends a touch of pleasant colour to the surroundings. Many beds of ornamental conifers, including new species from China, and of rhododendrons, which will be in their full glory next month, have also been set out by this firm and many others.

Near to the industrial department of the exhibition, which is of much interest, and contains a section dealing with pathological problems met with in bulb cultivation, is a small rock garden laid out by Messrs. Sengasskamp, Laren, N.H. The arrangement

is good and gives one the idea of spaciousness. The subjects are well chosen, and produce the maximum of effect. Many choice alpine fill the crevices and niches in the rocks, while splashes of a bolder colour appear here and there through judicious mass planting of spreading varieties. Dwarf shrubs are planted at intervals between the more trailing alpine, while a background of tall piceas completes the exhibit. Other two rock gardens are to be met with in the outlying parts, one designed by Messrs. A. Koper, Heemstede, the other by Messrs. Kweekerij, Moerheim. The former, laid out in woodland intersected by many winding paths, contains numerous interesting alpine, such as *Raoulia australis* (the "vegetable sheep" of New Zealand), saxifrages, primulas and dwarf shrubs. The latter is laid out on a mound in a series of banks. The idea is a novel one, and the plants are shown off to the best possible advantage. Stretching to the left of the exhibition hall there lies a very fine formal garden designed and executed by the Dutch Bulb Exporters' Association. The beds, planted up with tulips and hyacinths, are laid out in squares and rectangles. In the centre of the garden, which is enclosed by an evergreen hedge, stands a single-spray fountain. Undoubtedly one of the best gardens is that laid out by Messrs. Van Tubergen of Haarlem. The natural surroundings have been taken advantage of to the full and many choice woodland plants have found a place beneath the original trees of the park. Masses of *Anemone fulgens* and the St. Bavo strain lend a vivid touch of colour to the scene, which is mellowed



by the yellows of the daffodils and the more delicate shades of the hyacinths. Erythroniums, bulbocodiums, dwarf narcissi and ranthis, also add considerably to the general effect. Along the streamside a border containing hyacinths and the ever graceful water lily tulip, *T. Kaufmanniana* Gaiety, whose fine blooms are carried on stems barely an inch in height, with bushes of *Mahonia Bealei* at intervals, was also laid out by this firm. The outside exhibits cannot be passed over without reference to the excellent show of topiary work by Messrs. Helverda and Co., Aalsmeer, and also the numerous small fruit gardens laid out by firms engaged in fruit culture throughout Holland.

The value of these outside exhibits undoubtedly lies in demonstrating the excellent effects which are to be obtained by the judicious planting of spring-flowering bulbs, and also from the placing of selected species of shrubs and conifers. One recognises the importance of mass planting to secure good colour effects, and also the species and varieties which can best be planted together so as to obtain a harmonious colour scheme. Moreover, the qualities and characteristics of recent acquisitions can be

pink, blues, mingled with the dark and light green tints of the foliage to produce such a blend of colour that will not readily be forgotten. Probably the principal feature was the rhododendron in its many varieties, closely followed by the azalea. Of late years a great deal of work has been carried out by Dutch firms, notably Messrs. C. B. van Nes and Messrs. Koster, in the raising of new hardy garden hybrids. That success has attended their efforts is beyond question, judging from the wonderful display presented by those two firms. These Dutch hybrids are both larger and finer in every way than the ordinary type of garden hybrid, and carry large trusses of magnificent blooms of exquisite shades. The owner of any exposed garden will find his requirements excellently catered for if a wise selection of these hybrids be made. In Messrs. C. B. van Nes' exhibit, laid out in the centre of the hall were beds of Unknown Warrior, Mrs. W. H. Gare (Mons. Thiers  $\times$  Koningen Wilhemina), Armistice Day, Horsham, Britannia, The Countess of Athlone and Van Nes' Sensation (White Pearl  $\times$  Sir Charles Butler). This latter variety is a magnificent hybrid, carrying large trusses of pale lilac

standpoint, and bears abundant blossoms of a shade of orange which assumes a fiery tinge when caught by the rays of the sun.

Azaleas and rhododendrons in variety relieved by flowering laburnums, *Wistaria sinensis* and double-flowering cherries were exhibited by many other firms. Of special note was the exhibit of Messrs. van Kleef of Boskoop, of Rhododendron Pink Pearl, which formed a perfect sea of colour. Hybrid azaleas, notably crosses of *chinensis* and *mollis*, were shown by others, vying with the rhododendrons for pride of place. Roses, both polyanthus and hybrid teas, contributed in no small measure to the array of colour and bloom; while hydrangeas, staged by Messrs. Jac de Ridder, Aalsmeer, and cyclamens, shown by Messrs. D. Spaargaren supplied the more delicate shades of blues and pinks. The hydrangeas were especially fine and showed the results of careful attention and cultivation, the heads of flowers being 6ins. to 9ins. across. Primulas were also represented by numerous varieties of *P. obconica grandiflora*, while close by, tulips, rising above the graceful dangling bells of a bed of lily of the valley, supplied a patch of deeper colour. Carnations and orchids, which received considerable attention from Dutch visitors, were in the able hands of Messrs. Stuart Low of London. A very fine exhibit, occupying a large space, was that arranged by Messrs. P. van Nes of Boskoop. The exhibit was in the form of an oval with a raised background of pink, red and white rhododendrons flanked by tall yews, while beds of yellow azaleas and a few brilliant red polyantha roses along with one or two plants of *Cytisus præcox*, occupied the central part. Messrs. C. G. van Tubergen, in addition to their outside exhibit, presented an excellent display indoors in the form of a walled garden surrounding a rectangular pool. Many uncommon plants were represented and the whole provided rather a pleasing picture. Primulas, of which we noted one species, *P. redolens*, occupied along with *Stylorum* crevices in the wall. One of Forrest's finds, *Caltha radicans*, raised its yellow heads alongside the pool, while varieties of *Iris filicifolia*, *Lilium longiflorum*, fritillarias, triteleias, sprekelias, and tritomas also presented their nodding blooms. It was a most interesting little garden in the midst of a sea of colour.

Space does not permit of giving an adequate description of the numerous exhibits, chiefly narcissi, which were to be found in the Annexe. Many firms were represented, including Messrs. Warnaar of Sassenheim and The Welsh Bulb Fields.

In conclusion, the international character of the exhibition may be emphasised. Beds and groups are clearly labelled so that the amateur should have no difficulty in identifying the plants and thus be encouraged to greater effort in the future. In such an exhibition, acquaintance is renewed with all the older well known and time honoured flowers, while a knowledge of new species and varieties is gained. The arrangement and placing of the exhibits have been executed with great skill and meticulous care, and reflect the greatest credit on the committee. During May the exhibition will certainly be at its zenith as the greater part which now shows as tints of green will then be a blaze of colour, and will amply repay the visitor who makes the trip across to Holland.



IN THE EXHIBITION HALL DURING THE SECOND SPECIAL SHOW

studied first hand, which is of great advantage to those interested in the commercial aspect.

Inside the exhibition hall a magnificent collection of flowering shrubs, hydrangeas, azaleas, rhododendrons and roses, backed by many other spring-flowering subjects, was staged from April 10th to 19th. This was the great Easter Show, for which all Holland was *en fête*. That the Dutch take a keen interest in and are intensely proud of their flowers was evidenced from the crowds which poured in from the outlying districts to Heemstede on Easter Sunday. It appeared as if all the world and his wife were there. One cannot find words to describe the scene in the spacious hall. Reds, whites,

flowers with frilled petals. Many numbered hybrids were also shown which varied from pale pink to deep red tints. Messrs. M. Koster and Sons of Boskoop also staged a large and varied selection, notable varieties in this collection being Raoul Millais with delicate pink blooms 2ins. to 3ins. across, Mrs. Lindsay Smith, a very fine hybrid, almost outdoing Pink Pearl by bearing large white blooms almost 4ins. across; Robert W. Wallace, with characteristic elongated trusses of pale pink flowers; Hugh Wormald, with pink blossoms resembling an amaryllis flower in shape. Azalea Brilliant Red, also staged by this firm, is a variety of great merit from the garden

## SERVICE FOR READERS

Though so many subjects are dealt with in each issue of *THE GARDEN*, it must constantly happen that readers seek information which is not immediately available. In such circumstances they should make use of our new Service Department. Through its medium each reader's own particular enquiry can be dealt with. No matter what the question is, whether advice is sought as to—

RESTOCKING A GARDEN, COLOUR SCHEMES FOR GARDENS, THE BEST PLANTS FOR CERTAIN SITUATIONS, WHERE TO OBTAIN NEW AND RARE PLANTS, INSECT PESTS, NAMING OF PLANTS, AND THE HUNDRED AND ONE OTHER DETAILS RELATING TO THE GARDEN—

there is always information available from a staff of expert contributors and consultants; and there is no charge for this. It is one of the additional means of Service which *THE GARDEN* is glad to render to its readers.

All communications should be addressed to the Service Department, *THE GARDEN*, 20, Tavistock Street, Covent Garden, London, W.C.2.



# SIMPLE GARDENING

## WALLFLOWERS.

THESE plants will grow in almost all kinds of soil and even in old mortar rubble or a heap of gravel; but the resultant plants are not like those raised and grown on through the various stages with continuous care. Two plants, really well grown, are far more satisfactory than five grown without any detail treatment. We usually grow more plants than are required to fill the given spaces in our borders; they possess a single central stem only, the side ones being too weakly to bear flowers such as they ought. The cultivator should make up his mind as to the number of colours necessary for his purpose and sow seeds accordingly. It is neither necessary nor desirable to sow seeds in boxes or even cold frames—except in the case of a back-yard or very small garden where border room cannot be spared. Prepare a border in an open quarter, not too near a wall or hedge, especially a privet hedge, as the roots of the latter make the soil very poor. Very rich soil I do not advocate, but that of medium good quality and such that can be nicely firmed. Very poor soil should be made richer, as, throughout, the plants should grow steadily and sturdily. Sow the seeds thinly in shallow drills, transplant the resultant seedlings, when about 3 ins. high, 6 ins. apart in a nursery bed. Keep the soil clean and by October a splendid batch of plants will be available for planting where they are to flower. Every plant should make a flowering specimen 12 ins. across at least.

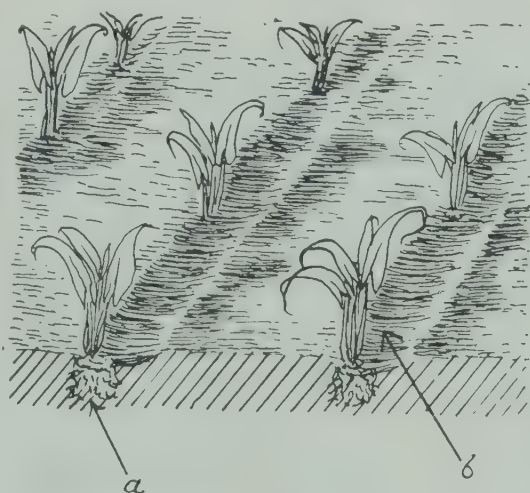
## ZONAL PELARGONIUMS FOR WINTER FLOWERING.

Amateur cultivators who possess warm greenhouses or conservatories still retain their affection for these plants and do their best to have a nice batch ready for staging by the month of September. But there are many who are just starting to grow the plants and others who have failed in their attempts. In the first place, the zonal pelargonium is a sappy-stemmed plant, and so we must try to get the wood as hard as possible during the summer months. After mid-June it is not absolutely necessary to have a garden frame for the purpose. We must make a selection of varieties at the present time, if this has not been done in February or March. I strongly recommend cultivators to grow single-flowered as well as double varieties, as the latter suffer from damp more than the singles. If cuttings are to be inserted, root them singly in the smallest pots available—72's—placing them in a frame or on the stage in a greenhouse; if on a shelf in the latter, a little shade will be beneficial at times. Cuttings already rooted should be re-potted as soon as possible. For cuttings, a mixture of leaf-soil, sand and loam in equal proportions; and for the first re-potting, loam two-thirds, leaf-soil one-third, with a small quantity of sand. For subsequent

re-pottings a similar compost with the addition of a 5 in. potful of bone-meal to a bushel. From mid-June to the end of August place the plants on a bed of ashes in the hottest position in the garden, and remove all flower buds, also stop straggling shoots and feed when the pots are filled with roots.

## THE TREATMENT OF ARUM LILIES AFTER FLOWERING.

There are several ways of treating these valuable and useful greenhouse plants after they have finished flowering. A very strong plant will bear five blooms between the month of August and the following Easter; but the majority bear three blooms each. As a general rule we overcrowd the plants in the pots; they increase rapidly, and grading is well worth attention. The present is



a suitable time to grade the plants, placing the strongest on one side, the medium by themselves, and the weakest also, so that there will be three batches of them, the small ones being grown throughout without being subjected to a forcing temperature; they will then gain in strength rapidly. The arum, during its growing season, likes plenty of water both overhead and at the roots, as long as there is not any stagnant water in the pots. Good drainage is essential. Water must not be suddenly and totally withheld; do this gradually. Plant out as shown at *a*, leaving a shallow along the rows as shown at *b*, to retain rain water. If the plants are rested in their pots, place the latter, *c*, on their sides; in due course the leaves will wither as shown at *d*, but they should not be removed before the re-potting or re-starting in the latter part of July. These will bear the earliest

flowers, the planted-out ones being lifted in September.

## BERRIED SOLANUMS.

The variety most generally grown is *Solanum Capsicastrum*. The varieties Williams' hybrid and *S. Hendersonii* are also worth growing, their berries being very fine but, as a rule, not as plentiful as those of the first-named sort. These plants are excellent for furnishing bright colour in the greenhouse during the autumn and early winter months. It is not necessary to have a strong heat, as the plants do very well in the same temperature as zonal pelargoniums. They are not difficult to grow, but to obtain very fine specimens constant care is needed, or the berries will be few in number. At the present time the young plants, raised from cuttings or seeds a few weeks ago, should be in tiny pots on a bed of ashes in a cold frame, whereon mats are placed every night, as frost must be excluded. Fibrous loam and leaf-mould with a small quantity of old rotted manure added will answer as a potting compost throughout their season. About the middle of June the plants should be placed outside in a sunny position, also on a firm bed of ashes. Six-inch pots will be large enough for the final potting. Now all that is necessary to be done till the plants are housed in September is to water and feed them regularly, using clear soot-water twice a week and clear liquid manure also twice a week. On hot days syringe early in the afternoon. Stop any long shoots growing beyond the general contour of the majority.

## RE-POTTING AZALEAS.

I am referring now to Indian azaleas, those charming shrubs in pots so much appreciated by owners of greenhouses and conservatories. The plants are often much damaged by bad treatment after the flowers have faded and this chiefly through ignorance as to the proper way to deal with them. They like cool quarters during the hot days of summer and cool conditions may be ensured by placing the plants on a bed of ashes, tiles or slates on the north side of a wall or fence. But before transferring the plants to such quarters it may be advisable to re-pot them. It is unnecessary to do this every year, but every alternate year. I have grown plants nine years without re-potting them, but only as an experiment. The flowers were numerous every year, but smaller, too. Very fibrous loam, from which all loose soil has been sifted, two-thirds, and peat and half-rotted leaf-soil in equal proportions, one-third, will form a suitable compost. Use clean pots and crocks, drain the pots well and firm the new compost. Retain the plants in the glass structure, carefully watering and syringing till the end of May. Then place them outside, continuing the careful watering and syringing till the end of September, by which date the wood will be ripened and new flower buds formed.

GEORGE GARNER.



## NOTES FROM CONTRIBUTORS

### CALCEOLARIA POLYRRHIZA.

IT is a pity that we have no popular name for this little hardy calceolaria, although by a free translation we might call it the "many-rooted slipperwort." The specific name of polyrrhiza is a great obstacle to many folks, and we might really adopt the title of the "Creeping Calceolaria." It has quite a spreading habit, sending its little roots out in all directions so as to form a mass in the open ground, or in rockwork springing up in all the openings between the stones adjacent to the plant. This is one of the factors in favour of this calceolaria, although not appreciated if we place some other and choice plant too near it without sinking stones deep enough to prevent the calceolaria from ingratiating itself among the roots and growths of the other flowers. But we cannot well afford to do without this, the hardiest of the calceolarias. *C. plantaginea* and *C. Kellyi* are not nearly so hardy, although they will thrive in milder gardens, and we can enjoy *C. polyrrhiza* as it sends up its shining foliage among the rockwork and embellishes its home with its stems bearing branching sprays

brilliance; when one plant alone, it sends out long shoots which bear large trusses of flowers. Seed should be sown in spring.

If, for some purpose, plants are required true to variety, they must be obtained by breaking up old clumps as indicated above. Plants raised from seed show much variation and cannot be depended upon; but it is possible to have seed of whites, yellows, reds, gold-laced and others. A packet of mixed kinds will give a delightful variety in all shades of self and attractive blendings of different shades. I have recently been pleased with seed which I obtained, known as Munstead varieties, mixed. I wish to point out to beginners that the polyanthus is very, very easy to grow; it needs no frame, no shelter and no care beyond transplanting from the open seed-bed when the plants can be handled. —LANARKSHIRE.

### HYDRANGEA HORTENSIS.

THIS beautiful shrub, which attains a height of from 3ft. to 5ft., is well worth cultivating, and its compact mass of blooms are very conspicuous among neighbouring

this has disappeared the plants may be pruned to their base and placed in the frame again for the winter. During March or April it will be necessary to re-pot the plants after their first bloom into pots just large enough to take the roots comfortably. The old soil is well shaken from the roots, and a fresh compost may be prepared consisting of one part rotted cow manure, leaf-mould and sand, and two parts good loam. In June the plants can with advantage be transferred to 8in. pots containing a similar compost and placed in their respective flowering quarters. *H. hortensis* is a half-hardy plant, and thrives well in the south of England out of doors, but in more northern counties it blooms very successfully in a cool house or conservatory.—J. B. C.

### "EVERLASTING DAISIES": A USEFUL TRIO.

AMONG the flowers which many folk like to call by their common name of Everlasting Daisies, there are three which bear a similarity, viz., *rhodanthes*, *acrocliniums* and *helichrysums*. All may be sown and grown out of doors if desired without being raised under glass, a fact which I think is sometimes lost sight of. When a sowing is made out of doors, the middle of May is soon enough to start, and where the chief object is to grow the flowers for cutting for winter decoration, I find that a May sowing answers. Most people, however, with room available in a greenhouse like to have those very dainty flowers—*rhodanthes*—earlier, and for this reason sow seed in pans of soil made up of loam, leaf mould and sand, pricking the seedlings off when ready and finally potting twelve or fifteen in a 6in. or 7in. pot. The pink and silvery white forms of *rhodanthes*—*Manglesi* and *maculata alba*—are very charming for indoor decoration, and when in bloom, last a long time. *Acrocliniums*, being somewhat similar in form, but more hardy, can be sown out of doors where they are wanted to bloom. They delight best in a warm, sunny position and to see them at their best should be sown thinly in groups. *Helichrysums* are the most robust of them all, and before being planted in their final quarters ought to be pricked out for a time. Three or four feet should be allowed between plants in the borders. All "Everlasting" flowers are best gathered when half opened to allow for expanding in the drying process. —CLAREMONT.



THE FINE LARGE AND COMPACT HEADS OF BLOOM OF HYDRANGEA HORTENSIS.

of yellow flowers, of curious formation and carried on stems varying from 6ins. or 8ins. to even 18ins. in summer. It is a good doer even in a rich border; it will flourish in rockwork. It may also be employed in the crevices of crazy pavement or a retaining wall or in stone steps, and altogether is a charming little plant.—S. ARNOTT, *Dumfries*.

### POLYANTHUS FROM SEED.

I HAVE not the least hesitation in stating that the most common garden plants often make a brilliant show and especially among these common plants I would mention the polyanthus. Everyone knows this plant, and I believe that most gardens contain at least a few plants, but not everyone grows them to display their full merits or gives them a chance to exhibit their glorious colours.

The most robust plants are those raised from seed or those which have been divided up during late summer, i.e., after flowering. When the polyanthus is left to grow as it will it becomes a large clump, the flowers decrease in size and the colour loses its

flowers. They are largely used for terraces and conservatories, but wherever they stand they are certain to be admired. They are best propagated by cuttings, and these can either be taken direct from a parent plant during August or September, or they can be purchased from any reliable nursery. To take the cuttings successfully, the cut should be made just beneath a joint and be of ripe wood about 6ins. in length. The bottom leaves may be removed and the cuttings inserted in 5in. pots containing a compost of equal parts of leaf-mould and good loam with a fair sprinkling of sharp silver sand. The pots may be stood in a cold frame, as near to the glass as possible, and shaded from the hot sun until the roots begin to form. With this treatment, and a fair watering occasionally, it will not be very long before the cuttings secure a grip. During the winter the frame must be made frost-proof, but when there is a normal temperature a good supply of air may be given. The 5in. pots will be quite large enough for the first year's bloom, and as soon as

### LETTUCES BETWEEN BEETROOTS.

IT is a very excellent plan to arrange that some of the lettuces, at any rate, are between the rows of beetroot. Then, should the summer bring with it a long spell of very dry weather, one can still be sure of fine crisp salad. This is so for a very interesting reason. The leaves of the beet are large and very glossy, and on the surface of the foliage the dew condenses to a considerable extent. In the early morning hours this moisture runs from the tips of the beetroot leaves in a stream. If the ground round the plants is examined before the sun has been up long, it will often be found to have been soaked with water. Naturally, if the lettuce plants are in close proximity to the beetroots they will get all the benefit of this supply of moisture. The hotter and finer the weather the more abundant will be the drenching of dew which they receive. During the exceptional summer of 1911 an old gardener, with whom the writer was acquainted, was the only one who kept up a regular supply of good lettuces. These were all grown between beetroot plants in the manner indicated.—S. LEONARD BASTIN.



No. 2.

The Golf Club  
Secretary

## Men who appreciate The **ATCO** MOTOR MOWER

The above letter from the Honorary Secretary of a well-known Club fully endorses the opinions expressed by the Secretaries of many Golf Clubs in all parts of the country. Let us prove ATCO claims by arranging a free demonstration on your own grass, without obligation.

16 inch Model £50 22 in. Model £75. 30 in. Model £95  
Personally Delivered and Guaranteed 12 months,  
5 per cent. for cash in 7 days.

All who take a pride in their Lawns should send for free  
ATCO Booklets, "Turf Needs" and "Notes of Praise."

**CHAS. H. PUGH, Limited**

Whitworth Works, 31, Tilton Road, BIRMINGHAM

### The Hillsborough Golf Club.

W. FERGUSON, HONORARY SECRETARY.

42, CROFTON AVENUE,  
SHEFFIELD. 2nd. FEBRUARY 1925

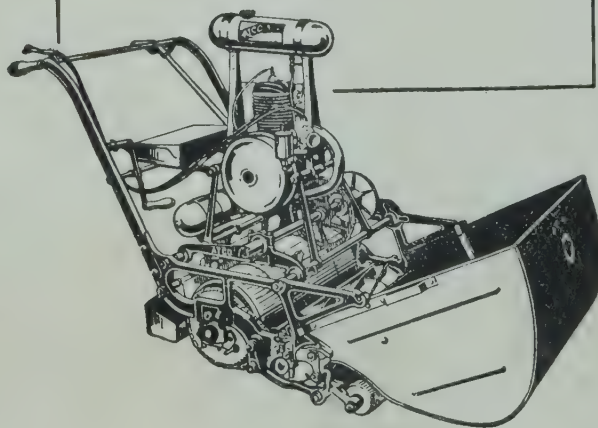
Dear Sirs,  
In the Spring of 1921 my Committee purchased a 22" Atco Motor Mower and the Greens Committee desire me to testify to the excellent service rendered by the machine.

For four seasons the Atco has been in constant use, and beyond "wear and tear" replacements, the cost of upkeep and running expenses have been surprisingly small.

Satisfied that the machine had justified all that was claimed for it my Committee purchased a 30" Atco in 1923, and after two seasons' work without breakdown or repairs of any kind, I unhesitatingly say that the quality of its work is beyond praise.

Yours faithfully,

Honorary Secretary.



Use **ABUNDA**  
for VEGETABLES  
Use **VITALIZER**  
for FLOWERS  
Use **POTOMA**  
for TOMATOES

SOLE MANUFACTURERS:

STONEHOUSE WORKS (Hort. Dept. H.)  
WEST BROMWICH.

Staff of Expert Chemists is available to give advice on  
the suitability of various Fertilizers for different soils and are  
prepared to manufacture Fertilizers for special requirements.



Horse and Hand Hoe  
Cultivators

70/- & 35/-

Types made include Pneumatic,  
Hand, Knapsack, Bucket and  
Wheeled, Wet and Dry Sprayers  
Prices from— **10/-**

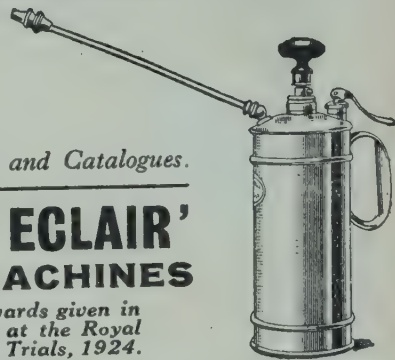
Write for Full Particulars and Catalogues.

**VERMOREL 'ECLAIR'  
SPRAYING MACHINES**

Gained the Highest Awards given in  
their respective classes at the Royal  
Horticultural Society's Trials, 1924.

**COOPER, PEGLER & CO., LTD.**

24a/26c, Christopher St., Finsbury Sq., LONDON, E.C.2



## NETTINGS.

**GARDEN NETS**—for Fruit Protection. Any lengths and widths. Corded all round.

New 1in. square mesh, heavy ..	6½d. per sq. yard
New 1in. " " medium ..	5½d. " "
New 1in. " " light ..	5d. " "
New 1in. " " medium ..	7d. " "
New 1in. " " medium ..	3½d. " "
Repaired 1in. " " ..	
Repaired (not corded) 1in. diamond mesh, 9/- per 100 square yards.	

**NEW TENNIS BOUNDARY NETS.**

Any lengths and widths, corded all round, 7d. per sq. yd.

**NEW TENNIS NETS.**

Various qualities, from 16/- to 31/- each.

NETS for all purposes. Samples and full particulars from the manufacturers—

**JOSEPH BENTLEY, Ltd.,**  
Barrow-on-Humber, HULL.

(Sole proprietors of B. EDDY & SONS).



IS YOUR LAWN SATISFACTORY?  
**DAISIES, DANDELIONS, &c.,**  
are all very disfiguring, besides being detrimental to true Tennis or Croquet.

THE PROVED

**Velvas**

LAWN SAND.

WILL REMOVE THEM AND WILL STIMULATE THE GRASS.

SEASON'S PRICES.

In Kegs	In Bags	In Tins
112-lb. .. 29/6	112-lb. .. 26/6	14-lb. .. 5/-
56-lb. .. 16/-	56-lb. .. 14/3	7-lb. .. 3/-
28-lb. .. 9/6	28-lb. .. 8/3	3-lb. .. 1/9

If your Seedsman does not carry a stock, send your order  
direct to the Manufacturers:

**ROBINSON BROTHERS LIMITED,**  
WEST BROMWICH.





## DULAU & COMPANY LIMITED.

34, 35, 36, MARGARET STREET,  
LONDON, W.1.

NATURAL HISTORY AND GENERAL  
BOOKSELLERS AND PUBLISHERS.

We have just published our  
Catalogue No. 125, consisting  
of 4,439 items of important  
works on Botany.

This Catalogue is divided into the  
following sections: Regional floras,  
gardening and horticulture, fruit  
culture, silviculture, gardens and  
landscape gardening, biology of  
plants, monograph biography, etc.,  
herbals and early gardening, crypto-  
gamic botany, phyto-pathology,  
geoponica, and serial publications.

*This catalogue will be sent post free on  
application.*

**'Auto-Shreds' did it!**

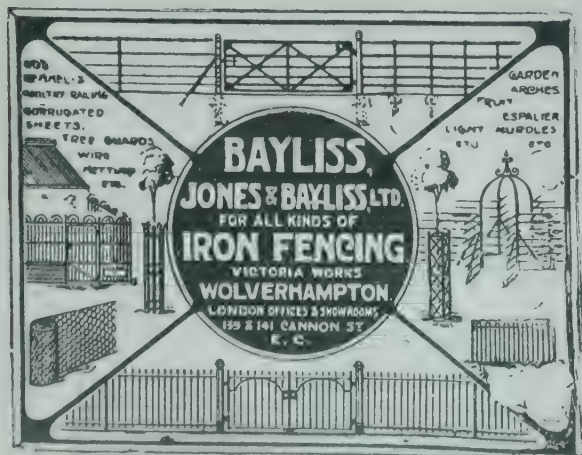


I just burnt them on the  
ground and they thoroughly  
fumigated my plants. The  
judge wanted the name of  
the stuff that kept my  
flowers so insect-free. I  
told him "Darlington's  
AUTO-SHREDS." At all  
seedsmen they cost

No. 1. (To fumigate 10,000  
cubic feet.) For tender  
or ordinary plants, 6/-  
No. 2. (10,000 c.f.) Ordinary  
plants 4/6  
No. 3. (1,000 c.f.) Ordinary  
or tender plants 1/-  
No. 4. (2,500 c.f.) do. 1/9

**W. DARLINGTON & SONS, LTD.,  
HACKNEY, LONDON, E.8.**

**FERTILISERS.**  
LAWNS, 20/-; FRUIT TREES, VINES, 19/6;  
GENERAL GARDEN USE, 17/-;  
WORM KILLER, newly introduced, 19/-  
Per cwt., carriage paid. Also all other fertilisers.  
**HY. RICHARDSON & CO.,  
Skeldergate Bridge Works, YORK**



**BAYLISS  
JONES & BAYLISS LTD**  
FOR ALL KINDS OF  
**IRON FENCING**  
VICTORIA WORKS  
WOLVERHAMPTON  
LONDON OFFICES & SHOWROOMS  
199 & 141 CANNON ST  
E.C.

*Please mention THE GARDEN when writing.*

# Better Results

THE systematic use of the Famous "Ferry" Brand Specialities  
will give you the results you want—*better* results. You will be  
delighted with the quality of your fruit, flowers and vegetables if  
you take our advice—"Try 'Ferry' First."

Write for our list of 41 Specialities and FREE ADVICE. We  
shall be glad to help you.

### FERTILISERS.

Always use the FAMOUS  
"FERRY" BRAND FERTILISERS  
made by the largest Chemical works  
in South Wales.

Now is the time to use special  
"Ferry" Brand Garden Manure as  
you dig over your soil. This is an  
early and general manure.

Guaranteed Analysis.

14 lbs., 3/-; 28 lbs., 5/9; 56 lbs.,  
11/-; 1 cwt., 20/-.

Follow up this general Manure  
with our Specials.

### LAWN SAND.

The Famous "Ferry" Brand  
Lawn Sand destroys all weeds in  
your Lawn, and at the same time  
acts as a Fertiliser to the grass. It  
induces and maintains a perfect dense  
green sward.

Non-poisonous; perfectly safe  
to handle.

### PRICES OF LAWN SAND.

7 lbs., 3/-; 14 lbs., 5/6; 28 lbs., 9/6;  
56 lbs., 17/-; 1 cwt., 28/-.

*Carriage paid, for cash with order, to your  
nearest Railway Station in England or Wales.*

Always use the Famous

# "FERRY" BRAND SPECIALITIES

*"Try 'Ferry' First"*

The Briton Ferry  
Chemical & Manure  
Co., Ltd.

Briton Ferry,  
South Wales.  
(Established 1886).



**THOMSON'S  
MANURES**

Famous for  
half a century.  
Unrivalled for all  
Garden Crops.  
Sold by  
Seedsmen and Nursery-  
men everywhere.  
Sole Makers—  
**WM. THOMSON  
& Sons, Ltd.,  
CLOVENFORDS**

*Please mention THE GARDEN when writing.*

## TANNED GARDEN NETS

Small Mesh for Seeds and Fruit Protection  
60 yds. long, 1 yd. wide 5/- 60 yds. long, 4 yds. wide  
60 " 2 " 10/- 60 " 5 " 15/-  
60 " 3 " 15/- 60 " 6 " 40/-  
Half Lengths supplied.

### STOUT BLACK NETS

for Tennis Court Bordering, with Lines Top and Bottom  
30 yards long, 2 yards wide 20/-  
30 " 3 " 30/-  
30 " 4 " 40/-  
Standards for same, 10 ft. high, 3/6 each. All carr. pa.

**H. ROBINSON,  
Garden and Tennis Net Works, RYE**

*Please mention THE GARDEN when writing.*



## REMOVING TREE STUMPS.

WHEN planning a new garden the removal of one or more tree stumps has often to be carried out. If the business is tackled in the right way there is no reason why it should prove so difficult as is commonly supposed. Where the stump is partly decayed and is beginning to crack there is no better plan than to pour into the openings a pint or more of paraffin. This rapidly soaks into the wood and, on the following day, a fire of any dry rubbish should be set going on the top of the stump. In quite a short while the stump and most of the big roots will have been reduced to ashes.

If the stump is not rotten, but the wood has had time to get rid of some of its sap, the following is the best method of procedure: Get some old pieces of sheet iron and bend them round to form a rough chimney. The iron may be held in place by a few stout stakes and the lower part of the chimney should be rested in two or three bricks, so that there is a space between it and the top of the stump. Bore a few holes in the stump and then pour in paraffin. Set the oil-soaked wood on fire and a very fierce blaze will start roaring up the chimney. This will continue until the greater part of the stump has been destroyed.

When a tree has only just been cut down, the stump will naturally contain a great deal of sap. In such a case if complete destruction of both stump and roots is desired, the method known as "slow-fire" is strongly to be recommended. Here bore a hole in the centre of the stump 1 in. or 2 ins. in diameter and 18 ins. deep. Put into this about a couple of ounces of saltpetre and then fill up with water, finally plugging closely. Leave for as long as possible, several weeks or even longer is not too much, and then take out the plug and fill up the hole with paraffin. Ignite the wood at the top of the opening and the stump will smoulder away without any fierce burning. The burning will continue until every part which was penetrated by the saltpetre solution has been consumed. The fresher the wood the greater is the success of this plan, as the more sap there is in the wood the more widely is the saltpetre solution distributed. This last method is a convenient and successful way of removing tree stumps.—S. L. B.

## SWEET PEAS: THE ADVANTAGE OF AUTUMN-RAISED PLANTS.

EXHIBITORS of sweet peas have long since followed the practice of raising plants from seed sown in the previous autumn, and even those who grow for the production of flowers for home decoration are slowly appreciating the advantage of an early start. Instead of sowing seed in the open ground in March as formerly, numberless sweet pea enthusiasts sow in pots in late September or October, giving them the benefit of a little warmth until germination has taken place, and wintering them in the coolest part of the greenhouse, or a cold house, until the New Year has well advanced, when they are quartered in a cold frame until planting out time arrives. It depends, of course, somewhat upon locality as to the safest time to plant out of doors, but as a general rule April will find them so enured to cold in the frames, as to be able to stand outside elements. It may be taken for granted that sweet peas from an autumn sowing, and which were stopped so as to induce shoots from the base, are by April, not only stiff, bushy plants, but have the greater advantage over seedlings peeping through the soil about this time, in that they are well equipped with plenty of roots. Sweet peas are much hardier than most folks imagine, and will stand a deal of cold and even mild frosts with impunity if they have been well hardened. I planted out a row in March last year in bitterly cold weather, and "tucked" a little

straw round them for a week or two until they got hold of the soil. Several "spring-sowers" watching me planting them, solaced me with opinions that they would "do no good," but they were in flower early in June, weeks before outdoor sown plants! The outcome of my experience last year is this, that several of those friends, seeing the display, were won over, and for this season are fortifying themselves with plants, which a few weeks ago were well above the pots in a house from which frost is just excluded.—W. L. L.

## HOW SPRING STEMS SHOW.

AFTER the snow had cleared from *Pulmonaria angustifolia azurea* Munstead var., the few beautiful blue blooms which were expanded on March 22nd did not seem to be much the worse. Indeed, they looked rather prettily set—in the earlier part of the day—when mounted above the snowy mound. Later we hope to have a glorious display of blossoms from this blue cowslip, as numerous flower buds are showing on—as yet—the somewhat dwarf shoots. Now, as the brownish red stems of a phlox caught my eye I thought, here is colour again. Borders black or brown, yet so bright with big patches of *Scrophularia nodosa variegata*, which does not fail to attract attention with its creamy yellow and green coloured leaves. *Agrostemma coronaria atrosanguinea*, *Antennaria Margaritacea*, *Centaurea montana*, *Echinopsis ritro* and *Stachys lanata* supply the soft and silvery greys in somewhat slightly different tones, yet very necessary for variation and attractiveness at this season. Among the downy vertical leaves of *Centaurea montana* numerous thread-like spider's webs adhere from leaf to leaf, and if the apices of these clustered leaves are pressed so that they open out a little, one will see deep down in the centre of each shoot a black and green coloured crown, which is the flower bud.

The plump peony tops of reddish brown give with the dark purple red of *Dianthus nigrescens*, phloxes and solidagos just the shades to show how charmingly coloured are the young and tender shoots and leaves of hardy herbaceous plants at this season of the year. Some phloxes also give rather a striking shade of yellowish green, while greenish blue is supplied by the grass-like

leaves of *Asphodelus luteus* and *Iris sibirica*. The dark green of *Hesperis matronalis* is quite distinct from that of the fresh and finely formed lupin leaves in whose centre a globule of clear crystal water is upheld. The rosette leafy stems of *Lilium candidum* and *Lilium excelsum* stand boldly out on the borders and are indeed strong and healthy in appearance. Then we have the crumpled yellowish green and somewhat fan shaped leaves of *Veratrum nigrum* standing several inches above the soil level. These are the days of changing tone and altering form, while the young stems are growing actively.—DAVID ARMSTRONG.

## THE HORNED POPPY.

IN some of our sandy and gravelly sea coasts we come across the beautiful glaucous leaves and yellow flowers of the horned poppy, *Glaucium luteum*. It is said to be a biennial, but the writer has known for a series of years a plant or two on a gravelly sea shore which were undoubtedly perennial. In the garden it often suffers from being in too rich soil, and this conduces to shorter life than on its native sand or gravel. Indeed, to see the horned poppy at its best it should be seen growing in a place where one would think there was nothing but pure sand or gravel without any moisture at the roots for its nourishment. But it has long tap-roots which penetrate through the dry sand or gravel of the surface to moisture below, but do not absorb sufficient to render the plant coarse and over-vigorous, as too frequently happens in rich soil. On this sand or gravel the dwarf plants show their glaucous, handsome leaves and pale yellow flowers to more advantage and, I think, too, that the long, horn-like seed pods, which give it its popular name, are neater on poor ground than on any other. The remedy for coarseness with the horned poppies is poverty of soil. Seeds are procurable and should be sown in the open where the plants are to bloom, but young plants transplant quite readily. For a good many years now a handsome horned poppy with orange-scarlet flowers, and named *G. flavum tricolor*, has been in cultivation. That it is of much attraction may be realised when I tell that it received an award of merit from the R.H.S. It also can be raised from seeds, sown in spring.—S. A.

He can only tackle them one at a time—but—



# VERMOL

## KILLS WORMS AND GROWS GOOD GRASS

What users say of Vermol:—

### The GLENEAGLES GOLF COURSES.

"We are now using the three tons of VERMOL WORM KILLER recently supplied and the results are really amazing. The worms are coming up in thousands and everybody is delighted with the marked improvement of all the treated greens. I can recommend VERMOL with every confidence to all Golf Clubs."

**Vermol Lawn Sand**  
(Weed Killer)

**Vermol Grass Manure**  
(for impoverished turf)

**Vermol Insecticide**  
(for Leather - Jackets and other soil pests)

**Vermol Grass Seeds**  
(Finest Mixtures for all purposes)

Above specialities also highly recommended.

**VERMOL PRODUCTS CO.,**  
**61, St. Mary Axe, London, E.C. 3**

Telephones: Avenue 1869 & 1870.

Telegrams: "Pinerous, Phone, London."





## PUBLICATIONS RECEIVED.

"Sweet Pea Culture," by Donald Allan of Messrs. Dobbie and Co., Limited, Edinburgh, price 6d. A handy little booklet dealing with the cultivation of the sweet pea for ordinary decorative and exhibition purposes, with a list of varieties and a note on the insect and fungoid pests found to be troublesome. All enthusiasts will find it of value.

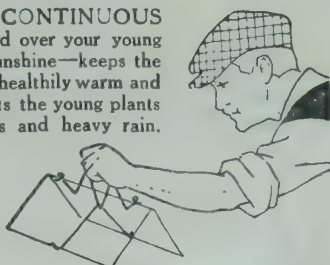
**Opening of Wisley on Sunday.**—The Council of the Royal Horticultural Society has decided to open the Experimental Gardens at Wisley on Sundays during the coming summer, from Sunday, May 3rd, to Sunday, September 27th inclusive, from 2 to 6 p.m. Admission cannot be obtained on Sunday at any other hour. The regulations governing admission are as follows:

- (1) Only persons bearing Fellows' tickets of the current year can be admitted. Each ticket admits three persons. Children cannot be admitted unless accompanied by an adult who must be responsible for their behaviour.
- (2) Parties cannot be admitted to the Gardens on Sunday.
- (3) No vehicles of any description are allowed to enter the Gardens.
- (4) No dogs or other animals can be admitted.
- (5) No bags, baskets or parcels and no flowers may be brought into the Gardens. Those who wish may leave such articles with the attendant at the gate.
- (6) Permission cannot be given for photography or painting on Sunday.
- (7) No persons shall touch the plants, flowers or fruit, nor interfere with animals, birds or nests in the Gardens.
- (8) Picnics are not permitted in the Gardens.
- (9) Expert advice will not be available on Sunday, nor will any fruit, etc., be sold.

## Do YOU waste Sunshine?

THE CHASE CONTINUOUS CLOCHE, placed over your young plants, traps the sunshine—keeps the atmosphere inside healthily warm and ventilated—protects the young plants against frost, birds and heavy rain.

With the Chase Continuous Cloche



your plants mature more quickly and fully

For General Use send for this case of "A" pattern Cloches. Each Cloche 7ins. high. Case contains 12 Cloches, enough to cover 14 feet. 18/-

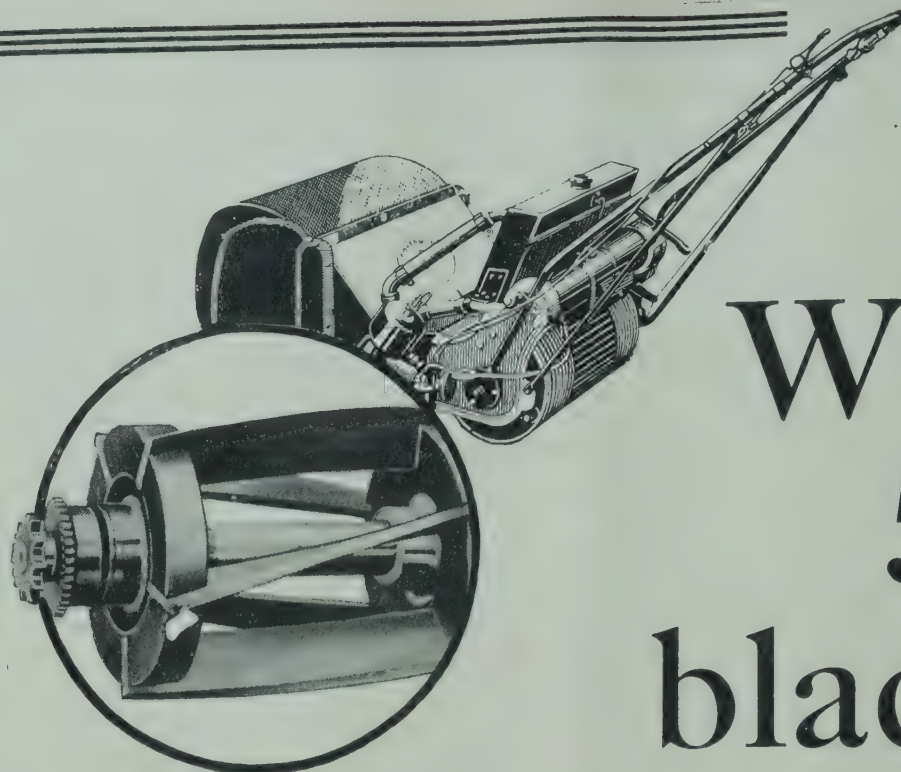
For Larger Plants order "B" Cloches, 9ins. high. Set of 15, covering 22½ feet. 35/-



Carriage Paid Home. (Scotland 2d. in 1/- extra.)

**Chase Continuous Cloche**  
A Trap to catch the Sunbeams

Dept. 7, Chertsey, Surrey



# Why 5 blades

We might have put seven—some have nine even. **HERE'S THE REASON**, the fine heavy steel blades of the 'Governor' revolves at 1,200 revolutions a minute at walking pace, which gives a cutting speed of 100 a second. This eliminates any tendency to rib the grass, and ensures a clean, even cut at all speeds. The cylinder itself is mounted on a double row of ball bearings which reduces all friction.

In like manner, throughout its entire construction, the 22" 'Governor' Patent Water-Cooled Motor Mower is a sound engineering proposition, built to cut grass quicker, easier, better and more economically than ever before. Results have justified our policy, and we offer the 'Governor' to you as the finest Motor Mower you can buy.

Therefore — choose the Water-Cooled "Governor"

## GOVERNOR MOTOR LAWN MOWER (WATER-COOLED)

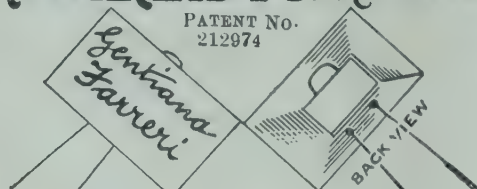
Write for Illustrated Booklet to Sole Proprietors:

JOHN SHAW & SONS, WOLVERHAMPTON, LTD. (Dept. 12), Wolverhampton  
Est. 1795.

Price  
22in. Water-Cooled **£75**  
22in. Air-Cooled **£65**  
Guaranteed 12 months

## The WIZARD Plant LABEL

PATENT No. 212974



Made in Red Pottery, 2½ x 1½ ins., with rustless wires, 12 in., 2/- doz.; 7 in., 1/7 doz. 1½ x 1 in., with wires 6 in., 1/4 doz. For tying on, 1/6 and 1/3 doz. Waterproof Ink, 9d. and 7d. bot. Crow Quills, 2d. Postage extra.

E. TORKINGTON · NEW HALL · MAIDENHEAD



**ROCKRAVEN GARDEN STONE**  
COMPANY SUPPLY POROUS LIME-STONE ROCKS FOR ALPINE SUBJECTS; WEATHER-WORN BY THE STORMS OF CENTURIES INTO DELIGHTFUL POCKETS, LEDGES AND FISSURES. "VARIED SHAPES AND SIZES"  
APPLY: SECRETARY, LINTON-IN-CRAVEN, SKIPTON, YORKS

## EUREKA WEED KILLER

LABOUR SAVERS. "EUREKA" LAWN SAND, SOIL FUME, NICOTINE, INSECTICIDES, FUMERS, SPRAYS AND OTHER CHEMICALS AND SUNDRIES. SEE LIST. PLEASE ASK YOUR AGENT FOR THE EUREKA ARTICLES—THEY ARE ALWAYS SATISFACTORY IF ANY DIFFICULTY IN OBTAINING, WE SEND DIRECT, CARRIAGE PAID.

Only Address: TOMLINSON & HAYWARD LTD. LINCOLN.

## PHOSPHATE OF AMMONIA PHOSPHATE OF POTASH

Very concentrated, especially suitable for high-class Gardening Fertilisers

PERRY & HOPE, LTD., Nitshill, nr. GLASGOW



# THE GARDEN.

**WATERER'S GOLD MEDAL RHODODENDRONS** and Azaleas, Rare Hardy Shrubs, Alpine and Perennial Plants, Vegetable and Flower Seeds, Scotch Grown Seed Potatoes, Bedding Plants and Dahlias. Catalogues Free.—**JOHN WATERER, SONS AND CRISP, LIMITED**, Twyford (Berks.), Bagshot (Surrey), and London.

**WAKELEY'S PATENTED HOP MANURE.**—The original and only substitute for Stable Manure. See advert on back cover.

**WM. DUNCAN TUCKER & SONS, LTD.,** Lawrence Road, South Tottenham, N.15.—Conservatories, Winter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**BIRDS' BATHS, GARDEN VASES, SUN-GLASSES, NESTING BOXES.** Catalogue (No. 4) free.—**MOORTON**, 60, Buckingham Palace Road, S.W.

**RIVERS' ASPARAGUS.**—Strong roots, one, two and three years old. Fruit trees, Roses, Vines and Orchard house trees of first-class quality. A large stock always on view. Inspection invited. Price list post free.—**THOS. RIVERS AND SONS, LIMITED**, The Nurseries, Sawbridgeworth, Herts.

**GARDEN SPADES, SPECIAL, 2/6, HAND RUBBERS, 1/6.** Carriage Paid.—**MCINTOSH**, Forgue, Aberdeenshire.

**TANNED GARDEN NETTING**, small mesh, 25yds. by 1yd., 2s.; 25yds. by 2yds., 4s.; 40yds. by 1yd., 3d.; 40yds. by 2yds., 6s. 6d.; 40yds. by 3yds., 9s. 9d.; carriage paid. Compare our netting with others. Lists now ready.—**GALLOP**, Net Manufacturer, Hastings. Telephone: 352.

**LOVERS OF ROCK GARDENS.**—Inexpensive plants for Sale. Apply **NELL SHAW**, Hatfield Place, Hth.

**WELLS' CATALOGUE OF CHRYSANTHEMUMS** now ready, and will be sent post free on application.—**WELLS & Co.**, Merstham, Surrey.

**WM. ARTINDALE & SON**, Nether Green Nursery, Sheffield, will be pleased to send their Catalogues of Hardy Plants, Seeds and Gladioli on request.

**TENNIS BOUNDARY NETTING**, 50 yds. x 20yds., 20/- Iron Standards, 9 ft., 3/- each. Tennis Nets from 1/- Sports Lists now ready.—**GALLOP**, Net Manufacturer Hastings.

**ALPINES, ROCK PLANTS ONLY.**—Descriptive Catalogue 600 varieties, free.—**TERRY LEE, F.R.H.S.**, Morden Road, Stechford, Birmingham.

**OR 10/-** I send free to you 14 rooted and cuttings of Carnations in 7 of the best named new varieties and 7 different colours.—**P. GEYER**, Horticulteur, St. Jean, Antibes, A.M., France.

**FULL OF WISE SAWS AND MODERN STANCES** our catalogue offers all that is brightest and best of the present day garden. The choice plant at Sixpence a dozen may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—**FEILDEN AND CROUCH**, 2, Wrotham, Kent.

**ROCK PLANTS. RARE SPECIES, AND** Garden Hybrids. List Free. Rock Garden always open for inspection.—**MISS TAYLOR**, Quarry Orchard, Cleas, Reigate.

**DAM.**—Fibrous Yellow Turf Loam. Illustrated Catalogue Free.—**A. B. JOHNSTON**, New Park, Cranleigh, Surrey.

**NEW ZEALAND PLANTS** for Seaside Gardens.—*Pittosporum nigrescens* for hedges, pot grown plants for planting, now 18/- per doz. *Olearia Macrodonia*, 12/- doz., splendid for hedges. *Olearia Haasti*, 1 ft., 12/- per doz. *Brachyglottis repanda*, 2/6 and 3/6 each. *Leptosiphon indivisa*, 2/6 each. *Ozothamnus*, 2/6 each. *Muhlenbergia complexa*, 1/6 each.—**TRESEDER & Co.**, The Nurseries, Wrotham, Kent.

**RESDEN CHINA DAISY** (*Bellis Perennis*). Light pink, very dainty, 5/- per doz. clumps. Carriage paid.—**YOUNG, F.R.H.S.**, Oxted Nursery, Oxted, Surrey.

**BARR'S LARGE-FLOWERED GLADIOLI** for May planting.—Descriptive List of the most decorative and beautiful varieties in cultivation. post free.

**BARR'S SEEDS FOR MAY SOWING**, for Vegetable and Flower Garden, Rock Garden and Greenhouse. Finest selected strains and tested growth. Special List Free.—**BARR AND SONS**, 11, 12 and 13, King Street, Covent Garden, London, W.C.2.

**THE DOUGLAS CLOVES AND BORDER CARNATIONS**; glorious scent, stiff stems, and continuous flowering. The new crop of seed is now ready to sow. 2s. 6d. and 5s. per packet. Plant catalogue now ready.—**J. DOUGLAS** (The Premier House for Carnations), Gt. Bookham.

**IRON AND WIRE FENCING FOR GARDENS.**—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—**BOULTON AND PAUL, LIMITED**, Norwich.

**ALL PROFESSIONAL GARDENERS** should become Members of the British Gardeners' Association. Full particulars (stamp).—**JOHN WEATHERS**, 1, Park View, Isleworth.

**SEWAGE DISPOSAL FOR COUNTRY HOUSES.**—No emptying of cesspools; a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—**WILLIAM BEATTIE**, 8, Lower Grosvenor Place, Westminster.

**JAMES BACKHOUSE, F.L.S., F.R.H.S.**, for many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to **CARR FRIGLA**, Arthog, North Wales.

**LAXTON'S NEW SEED CATALOGUE**, containing Novelties for 1925. New Pea "Bedford Champion" and "Laxton's Progress," post free on application. Fruit Tree Catalogue and Cultural Hints can also be sent, post free, on request.—**LAXTON BROTHERS**, Nurserymen, Bedford.

**ROCK PLANTS**, best varieties, inexpensive, list free.—**MARION GLEDSTANES**, Fardross, Clogher, Ireland.

**CHOICE NEW CHRYSANTHEMUMS.**—Our Catalogue of nearly 900 varieties, including Grand Novelties for 1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready. Post free on application.—**J. W. COLE AND SON**, Chrysanthemum Specialists, Peterborough.

**PRIMULA, ALPINE AND PERENNIAL** Seeds, from large (1,500) collection, sold cheap. List free.—**REV. J. F. ANDERSON**, Glenn Hall, Leicester.

**GARDEN NETS.**—Best tanned, small mesh, 25yds. by 1yd., 2/-; 25yds. by 2yds., 4/-; 25yds. by 3yds., 6/-; 25yds. by 4yds., 8/- Carriage Paid. Satisfaction guaranteed. Tennis nets from 10/- Special nets for tennis boundary. Pea training nets. Lists and samples free.—**G. JARRETT**, Net-maker, Rye.

**TENNIS COURT FENCING.**—A speciality. Made up as complete enclosures, with standards, wire, and straining posts, from 6 ft. to 12 ft. high. Write to Dept. FP/G for particulars.—**BOULTON AND PAUL, LTD.**, Norwich.

**VANCOUVER ISLAND** and Pacific Coast rare ornamental alpine and lowland plants, bulbs, etc. Only those difficult or impossible to obtain in England are offered. Plants well packed and despatched at the right time of year arrive in good condition. Write for list.—**J. BENNETT**, Lake Hill P.O., Victoria, B.C., Canada.

**GENTIANA FARRERI**, 2/- and 2/6; *G. acaulis*, 4d.; dozen, 3/6. Pompadour Primroses, 2/- each, etc. Postage extra.—**WYNNE**, Avoca, Ireland.

**FOR SALE.**—Unbound copies of **THE GARDEN**, 1916, 1918, 1919, 1920, 1921, 1922, 1924, in good condition. What offers?—**MRS. H. PENWARNE-EDE**, Applegarth, Maidencombe, Teignmouth.

**SUTTON'S LAVATERA LOVELINESS.** THE FINEST OF THE PINK MALLOWS. Extremely showy subjects for tall borders or large beds; carry large imposing flowers of rich colour on stems 2ft. or more in length. Per packet, 2/6 and 1/6. **SUTTON & SONS**, THE KING'S SEEDSMEN, READING.

**HERRING NETS** for protecting seeds, fruit, etc., approximately 100ft. by 30ft., 11/6 each. Other nets, better quality, 21/- each. Carriage paid. Cash with order.—**WM. G. GRIGOR**, Earl Street, Port Gordon.

**DOBBIE'S 1925 CATALOGUE AND GUIDE**, 136 pages, 194 illustrations. Free to all readers. Please mention **THE GARDEN** when writing.—**DOBBIE & Co., LTD.**, Edinburgh.

**BATH'S SELECT SEEDS AND PLANTS.**—New Illustrated Catalogue of choice Vegetable and Flower Seeds and Plants is now ready, and will be sent post free on application.—(Dept. E), **R. H. BATH, LTD.**, Floral Farms, Wisbech.

**CHEAP GOVERNMENT WIRE !!!** Great for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—**GREEN'S GOVERNMENT STORES**, 69, Albert Street, Lytham.

**108 GLADIOLI** for 8s. 9d. post paid.—The most dazzlingly brilliant flowers on earth, with spikes of blooms 18ins. long; 12 each of 9 kinds (108 bulbs), all separately packed and named, for 8s. 9d., post paid; half lot, 4s. 9d., post paid (cultural instructions and beautifully illustrated Flower and Vegetable Catalogues included).—**J. KAY AND Co.**, Goodmayes Road, Goodmayes, Essex.

**BEGONIAS AND GLOXINIAS.**—Kay's prize-strain with blooms often measuring 8ins. across; a collection of 12 Single and 12 Double Begonias, also 6 Gloxinias—separately packed and named, with cultural instructions and illustrated catalogues, for 6s. 3d., post paid; half lot, 3s. 6d., post paid.—**J. KAY AND Co.**, Goodmayes Road, Goodmayes, Essex.

**HEDGING PLANTS.**—**PRIVET.**—Strong English-grown, bushy and well rooted: 30-36ins. at 13/- per 100; 36-40ins. at 15/- per 100. **QUICKTHORN.**—Extra bushy: 24-30ins. at 10/- per 100. Carr. Pd. on 1,000 Lots.—**HODSONS**, Castlegate, Nottingham.

**MICHAELMAS DAISIES.**—Pyrethrums and other hardy perennials. For new catalogue, write to **MRS. THORNELEY**, Nursted, Devizes.

**GOVERNMENT TROUSERS AND JACKETS**, New, 6/9; Soiled, 3/9. Post Free.—**MCINTOSH**, Forgue, Aberdeenshire.

**GARDEN NETTING.**—Best selected, small mesh, tanned, 25 by 4 yds., 8/-, or 8 yds., 16/- Carriage paid. Tennis Nets and Standards. List free.—**STRAWBERRY NETTING Co.**, 5, Suffolk Terrace, Lowestoft.

**LOOK! TANNED GARDEN NETS.**—All orders despatched same day. 25 yards by 1 yard, 2/-; 25 by 2, 4/-; 25 by 3, 6/- Odd netting for bushes, 6 lbs. for 2/6. All carriage paid. Any sizes supplied. Also Tennis Boundary Nets.—**MOORE & Co.**, Net Works, Rye.

**CAULIFLOWER PLANTS.**—Best (Autumn-Sown) Plants.—Early London and Walcheren, 12/6 per 1,000; prompt delivery, carriage paid: cash with order. Special quotation for large quantities, and Price Lists of all varieties of Cabbage Plants (Autumn-Sown) of the best stocks and at the lowest prices, on application.—**JOHN GILLIES, PRESTONPANS, LTD.**, Prestonpans, East Lothian. Largest cabbage plant growers in Britain. Established over 50 years. Telegrams: "Plants, Prestonpans." Telephone 24 Prestonpans.

**GREENHOUSE PAINTING AND GLAZING.**—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7lb. tins., 4/- post free; 14lb. tins., 5/6, each, carriage extra, tins free.—Full particulars from **W. CARSON & SONS**, Grove Works, Battersea, S.W.11.



**GOLD MEDAL**  
R.H.S. :: 1925.

## Daffodils Daffodils

Before placing your order for the Autumn, send for my new

DESCRIPTIVE CATALOGUE  
Just published.

Therein you will find full particulars of all the choicest varieties and all are

### HOME GROWN BULBS

*We invite all enquiries on  
THE DAFFODIL.*

For Awards see R.H.S. report.

Catalogue post free on application to

**J. LIONEL RICHARDSON,**  
Prospect Gardens,  
WATERFORD, IRELAND.

Please mention THE GARDEN when writing.

**"Fine!"**



—just as if  
they'd had  
nothing but sunshine!

For General Use  
send for this case of  
"A" pattern Cloches.  
Each Cloche 7ins. high.  
Case contains 12  
Cloches, cover-  
ing 14 feet .. 18/-

For Larger Plants  
order "B" Cloches.  
9ins. high. Set of 15,  
enough to cover  
22½ feet .. 35/-



Carriage  
Paid  
Home.  
(Scotland  
2d. in 1/-  
extra.)

THE CHASE CONTINUOUS CLOCHE lets in all the sunshine and traps it—keeping your young plants always healthily warm during the coldest days and nights. Perfect ventilation. No coddling. No transplanting needed. Need not be removed for watering. Plants grow under it just as they would in the open in CONTINUOUS perfect weather.

Full particulars and  
prices in  
**FREE BOOKLET**  
No. 7  
from

**Chase Continuous Cloche**  
*A Trap to catch the Sunbeams*

Dept. 7, Chertsey, Surrey



### Notes from Maidstone.

#### GRAPES AND FIGS FOR COLD GREENHOUSES.

The following can be recommended for planting NOW:

**Grapes.**—Black Hamburg—without doubt the best all-round grape for a cold house. It sets freely and is easy to cultivate, essentially the Amateur's Grape. Of the white varieties, Foster's Seedling is the best; it sets well, crops freely, the skin is thin and the flavour most refreshing.

Planting Canes, 10/6, 15/- and 20/- each.

**Figs.**—These are most successful fruits for cold houses; perhaps the most popular is Brown Turkey, but there are other dark varieties easy to grow. Among white varieties, White Ischia is particularly good. Small plants, 5/- each; larger, 7/6 and 10/6 each.

**VEGETABLE AND FLOWER SEEDS.**—We would remind readers that our seeds are nearly as famous as our Fruit and invite a trial. Catalogues free.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.

No. 3.



The  
Headmaster

## Men who appreciate The **ATCO** MOTOR MOWER

The letter reproduced above, received from the Headmaster of one of many public schools at which the ATCO Motor Mower is used, is but another proof of the value of this machine wherever there is grass to keep in order.

16 inch Model £50 22 in. Model £75. 30 in. Model £95.  
Personally Delivered and Guaranteed 12 months\*  
5 per cent. for cash in 7 days.

All who take a pride in their Lawns should send for free  
ATCO Booklets, "Turf Needs" and "Notes of Praise."

**CHAS. H. PUGH, Limited**  
Whitworth Works, 31, Tilton Road, BIRMINGHAM

HEAD MASTER  
F.T. PENNINGTON.  
TELEPHONE NO 621.

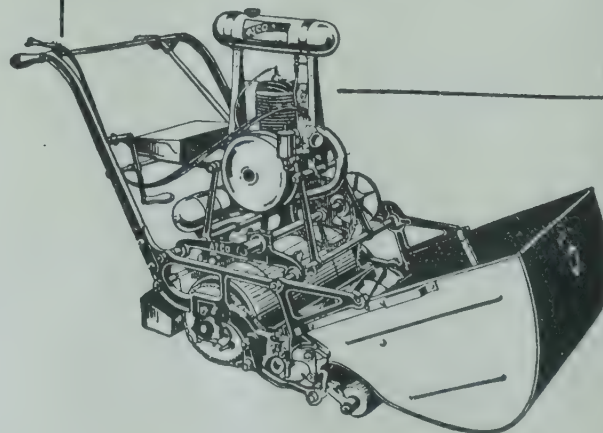
ARNOLD HOUSE SCHOOL,  
SOUTH SHORE,  
BLACKPOOL.  
12th February, 1925.

Messrs Charles H. Pugh Ltd.,  
Whitworth Works,  
Tilton Rd.,  
BIRMINGHAM.

Dear Sirs,  
I have used one of your 22" "Atco" Motor Mowers for the last two or three seasons, and have found it very satisfactory. Lawns which I had the greatest difficulty in getting mown once a week are now mown in one day without any trouble. There has been no breakdown of any moment, and I consider the "Atco" Mower an efficient machine fulfilling the claims that are made for it.

Yours faithfully,

*F. T. Pennington*







Vol. LXXXIX.—No. 2789.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
 Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
 Entered as Second-class Matter at the New York, N.Y., Post Office.

MAY 2, 1925

## GARDEN ECONOMICS

A FRIEND of mine, with a head for figures, told me the other day that he had been working out the expenses of his garden on a costing system and had found that it would have been cheaper for him to buy his potatoes and his vegetables at the local greengrocer and his flowers at a flower shop than to grow them in his garden. I believe that he had arrived at a definite sum saved. Although I had long had a suspicion that under certain conditions a garden was not a paying proposition, yet I scoffed at him as a man with no imagination and the conversation languished.

I have no head for figures and know that I should at once be skating on very thin ice were I to start out on an exposition of garden economics, but it is really a subject that bears investigation.

Gardening is considered a hobby by most owners of gardens whether they work their plot unaided or their domain with the help of a dozen gardeners and it is against human nature to run a hobby as a business venture. In this they are perfectly right, for few people make a living out of their garden and so it remains as a very pleasant bypath of their lives. On the other hand, although the vegetable and the flower garden run hand in hand, yet the one fills our tummies and so helps to satisfy a necessary want, the other gladdens our sight and our general feeling of pleasure and satisfies just as necessary an extravagance. Men who may spend their lives among figures and may have the cleverest business heads in the world, probably never dream of testing the profit and loss account of their gardens. They allot so much money to its upkeep every year and would be hurt and annoyed if anybody told them that as a business proposition their garden was a complete and utter failure.

In many cases there is no escaping the fact that the business side of most gardens is badly neglected and mismanaged. It is nobody's fault or everybody's fault; the owner may know nothing of gardening nor the gardener of business. They both go their own way without that liason which should exist between them, a combining of the two intellects. It is impossible to place a valuation on the enjoyment which flowers give to a household; on the other hand vegetables and fruit have a monetary value of a definite kind, and yet, when economy has to be practised, it is always the flowers which suffer and the allowance for their purchase and cultivation is cut down. I am sure that this is often a mistake. This does not mean that I advocate the policy of more flowers and less vegetables, but rather that the whole question of vegetable cultivation in the garden should be examined, for then there is something tangible on which to work. There are few households which

can be supplied throughout the year solely with the produce of their own garden and orchard; likewise, there are few vegetable gardens or orchards which are as productive as they might be. Likes and dislikes in vegetables are strong, so the cook or the housewife should be called into consultation when estimating for the year's supply. Then, as a nation, we do not know how to cook vegetables and we eat too few vegetables cooked and served as separate courses. The planning of the plots devoted to each vegetable may be at fault; which may mean wasted space. The rotation may be wrong and so valuable ground may be lying idle and unproductive for a great portion of the year. Odds and ends of ground may not be utilised for catch crops as they might be. It is points like these which I call economics of the garden, or perhaps economies would be a better word.

Flowers also have to take their share of the blame in garden wastage. Every gardener has his successes and his failures. It is perhaps only human that a gardener hates to be beaten and so tries again and again to turn a failure into a success. There may be something in the soil or in the local climatic conditions against him, or it may be lack of experience, or just be mere cussedness, but there surely comes a time when it is as well to bow politely to fate and grow something else which is known to be a success.

No doubt some day some fanatic will try to prove that so many thousands of pounds are wasted every year in British gardens, but until he turns up we may sleep soundly at nights. However cold-blooded it may sound to suggest the commercialising of the most charming hobby that man possesses, it might be as well if everybody examined the economic side of their garden once in a way, just to see if its efficiency could not be improved without taking away from its charm. I should be glad to hear of the experiences of any of my readers who may have a bent for accountancy and have kept thorough garden accounts.

E. H. M. C.

### AMONG OTHER ARTICLES IN OUR NEXT ISSUE WILL BE:

CARNATIONS AND PINKS, by Norman Lambert.

SEASONABLE WORK AMONG HARDY SHRUBS, by A. Osborn.

PLANT HOLIDAYS—II, by H. Stuart Thomson.

SOME NATIVE GEMS FOR THE ROCK GARDEN,  
by W. Ingwersen, Junr.



# DWARF SHRUBS IN THE ROCK GARDEN—II

BY DR. R. LLOYD PRAEGER.

WE now come to the main body of rock-garden shrubs, namely, those which are neither particularly small nor conspicuously prostrate in habit. Here the number and variety are so great that it would take ten articles instead of one to do them even scant justice. Without a very special knowledge of them it is not possible to make a selection in which any gardener will not miss one or two of his favourites, so I must plead for the reader's indulgence, for I lack that sure touch which appertains only to long experience or to no experience at all. Now, we use these shrubs for rather different purposes in the rock garden. Some may be employed *in addition to* the rock plants, to give shade or to break up a monotonous surface. These should be light-growing things, under or close to which the rock plants will still get enough light for their purposes. At the other end of the series we have small dense shrubs—notably dwarf conifers—which can really be used instead of the rocks themselves, and which have a good deal of the effect of rounded boulders. They are most useful at the back or on the ridge of the rock garden, to form a background or to break up a sky-line. We shall begin with some of the light growers, and work along to the denser groups.

*Artemisia tridentata* has silvery leaves and a dwarf sparse habit, and is quite effective. *Betula nana*, prostrate and creeping in its high alpine habitats, makes a light little shrub in our gardens. Several of the coprosmas, such as *C. propinqua*, are useful in the milder parts of our islands. *Coriaria terminalis*, which is shrubby only at the root, is very striking with its arching stems bearing a heavy terminal bunch of pellucid orange fruits. The smaller genistas, such as *G. nyssana* and *G. radiata*, are wholly commendable, as are the smaller olearias, such as *O. Solandri* and *O. myrsinoides*; but some olearias will not do in the colder parts of the country. The cotoneasters, apart from the prostrate species, are mostly too large for the rock garden, but *C. rotundifolia* is moderate in size and one of the best in leaf and fruit. *C. horizontalis*, with its flat branches, abundant berries and purple autumn foliage, is a splendid rock garden subject, though it takes up some room. There are a few good light-growing St. John's worts, such as *H. balearicum*, *H. ægypticum*, *H. empetrifolium*, *H. Moserianum*; and the dwarfer fuchsias, and cytisus such as *C. purpureus* and the hybrids *C. Beanii* and *C. kewensis*, are all airy and free-flowering.

Among denser things which form small mounds of foliage there is again a large choice. The rock roses (cistus and *heli-anthemum*) are a host in themselves, with a wealth of blossom of every tint but blue, and varying in habit from quite prostrate to roft. high. *Spiræa bullata* is neat and erect, with small dark leaves and red flowers; and *S. Anthony Waterer* is pleasing, with its variegated foliage and flat panicles of pink bloom. *Ribes alpinum* var. *pumilum aureum* makes a very neat little mound of golden foliage, appearing particularly early in spring. *Suæda fruticosa*, a native of salt marshes, is, on the other hand, very stiffly erect and bright green—rather striking, although its green flowers are minute. *Myrsine africana* and *Ilex*

*crenata* are small, evergreen and neat. There are two very curious dwarf forms of *Escallonia rubra* and *Olearia macrodonta* respectively, which originated as seedlings in a Donegal garden; both are small, dense and round, and of that bouldery appearance that conforms to a rock garden setting. The smaller forms of that kaleidoscopic "typus polymorphus," *Potentilla fruticosa*, are quite charming, with leaves green or silvery, and flowers ranging from white to deep gold. But the two most favourite forms, *P. Veitchiana* and *P. Vilmoriniana*, are rather large for the rock garden. The allied *P. davurica* is essentially a rock garden shrub, small, dense and slow-growing: it makes up for its deciduous habit by coming into leaf before winter has departed. There is a group of genistas which make dense hedgehogs of spiny branchlets—*G. anglica*, *G. dalmatica*, *G. germanica*, *G. hispanica* var. *minor* (the type makes a grand

round mass, but is rather big for anything but a large rock garden): all are very free in blossom. At least one of the shrubby New Zealand senecios, *S. laxifolius*, is quite hardy, and makes a pleasing grey mass; the smaller, neater *S. compactus* is preferable, but is not hardy everywhere. *Moltkia petraea*, a near ally of the lovely lithospermums, resembles them in its flowers of a priceless blue, and makes a tight little bush. The various forms of the familiar rosemary are hard to beat as a background to the rockery, where they may be joined by the dwarf *Cydonia Maulei* with its early brick-red flowers, of which there are white and deep crimson forms. *Corokia cotoneaster* will look well there, too, and for mild districts there are the dwarfer olearias, pittosporums and other distinct-looking New Zealanders. Some of the curious horsetail-like ephedras, relics of a distant age, such as *E. Gerardiana* or *E. americana*, look distinct when sprawling in a mass over a



ST. JOHN'S WORTS ARE ATTRACTIVE AMONG THE ROCKS.

rock. There are some dwarf willows that are excellent among the stones; for instance, *S. lanata*, with its woolly leaves and big catkins. The genus *daphne* supplies some good upright dwarf shrubs as well as the lovely trailers mentioned earlier; such are *D. alpina* and *D. collina*. The protean *Euonymus japonicus* supplies a whole set of varieties, from creeping to quite erect and dense—often variegated into the bargain. *Osmanthus Delavayi* is one of the best of all small shrubs, and has recently been very properly praised in THE GARDEN. In flower it is quite delightful. *Viburnum Davidii* is one of several neat guelder roses. Mention must be made, too, of the many dwarf erect forms of the ivy, *Hedera Helix*: vars. *congesta* and *minima* are among the smallest of these, and many others form fine evergreen clumps.

What are we to say of the veronicas, of which New Zealand supplies such a wealth of shrubby forms? In mild districts a rock garden might be filled with them alone, so great is their range of form, colour and size. It seems almost hopeless to tackle them where space is so limited, and I shall retreat ignobly with the remark that the most pleasing of all are *V. Lavaudiana* and *V. Hulkeana*, both of which grow excellently—in some gardens! But almost all are quite easy where frosts are not severe, and they are charming things in flower.



Where the soil is free from lime, or peat is obtainable, the door is open for a whole host of lovely dwarf shrubs, mainly belonging to that glorious family the *ericaceæ*; and here the writer of a discursive article like the present pauses appalled, for the dwarf *ericaceæ* alone would furnish material for several such articles. *Rhododendron* would fill a garden by itself, and there are also *kalmia*, *ledum*, *leucothœ*, *andromeda*, *erica*, *calluna*, *daboecia*, *gaultheria*, *pernettya*, *vaccinium* and what not. To "save my face" it is presumably necessary at least to mention a few selected species, but even this is unsatisfactory, for one could make a number of such selections, one as good as another. To plunge, then, into the lovely wilderness of *rhododendron*, a selection for the rock garden (additional to the very dwarf species mentioned in the previous article) might run as follows: Flowers white or nearly so—RR. *Colletianum*, *ferrugineum album*, *hirsutum album*, *indicum* (white forms), *micranthum*, *moupinense*, *serpyllifolium*. Flowers yellow—RR. *Anthopogon*, *flavidum*, *indicum* vars. Flowers red or purple—RR. *amœnum*, *ciliatum*, *ferrugineum*, *glaucum*, *indicum*,  $\times$  *intermedium*, *linearifolium*, *lepidotum*, *ovatum*, *parvifolium*,  $\times$  *præcox*, *punctatum*, *Rhodora*, *setosum*, *virgatum*. Of *kalmia* there are neat dwarf forms of the white-flowered *K. angustifolia*; *K. glauca* has pretty purplish rosy blossoms. *Ledum latifolium* and *L. palustre*, and their small cousin *Leiophyllum buxifolium*, are all commendable and white-flowered, the last having pretty rosy buds. The *leucothœs* are equally pleasing, the most suitable for the rock garden being *L. axillaris* and *L. Davisæ*. *Andromeda polifolia* is a thin little shrub with good pink bells. *Gaultheria*, already referred to, has a number of interesting species, from very small and prostrate to fairly large; but the larger ones have creeping stems which spread rather much for rock garden purposes. The hardy heaths (*erica* and *calluna*) are well known and most valuable, and it is not necessary to sing their praises here. *St. Dabeoc's* heath is especially useful and charming.

This enumeration could be prolonged till the cows come home. I must hurry on, and close with a brief reference to dwarf conifers and the large and indefinite group of sub-shrubs. Many of the conifers, either species or dwarf forms, are particularly pleasing in the rock garden. They are all evergreen, and their shapes often seem to fit the rocks and slopes particularly well. The exigencies of space compel a very small selection almost without description. The following form more or less dense roundish small bushes, matching the boulders themselves: *Abies balsamea hudsonica*, *Picea excelsa conica elegans*, *P. e. globosa*, *Cupressus Lawsoniana nana*, *Thuya occidentalis Ellwangeriana*. *Juniperus horizontalis* (*hudsonica*) is purplish and prostrate; *Picea excelsa repens* has a flattish



POTENTILLA FRUTICOSA MAKES AN EXCELLENT ROCK GARDEN SUBJECT.

habit, as has *Juniperus conferta* (= *littoralis*). *Abies pectinata* prostrata is a wild, picturesque sprawler. *Picea pungens* prostrata and *Juniperus chinensis* prostrata have a good blue colour, and *Cupressus obtusa pygmæa* is pleasantly coppery.

The tiny erect juniper which is usually sold under the incorrect name of *Juniperus hibernica compressa* makes an absurdly neat little column; its correct name is *J. communis compressa*. A few other choice things of rock garden dimensions are *Picea excelsa pygmæa*, *Pinus Laricio pygmæa* and *Cryptomeria japonica spiralis*.

Lastly, a word must be added about sub-shrubs—herbs with more or less erect stems which are perennial and eventually become more or less woody. Many of them are very familiar garden plants—southernwood, lavender, cotton-lavender, rue; and they are as useful as dwarf shrubs for giving variety or shelter. The micromerias are valuable, having a neat habit, fragrant foliage, and late blossoming. *Alyssum spinosum* is quaint—all flowers in spring, all thorns in autumn. The sub-shrub type is characteristic of dry regions, like the basin of the Mediterranean, and often displays the grey, hairy or downy leaves that are common in plants of semi-deserts. To treat this group adequately a separate article would be necessary.



GENISTA HISPANICA, WHICH MAKES A GRAND ROUND MASS, AND IS ESPECIALLY SUITED FOR THE LARGE ROCK GARDEN.



# LILIUM ALEXANDRÆ

BY A. GROVE.

A NOTE ON A LILY WHICH SHOULD BE MORE SEEN IN OUR GARDENS. ITS HISTORY AND PECULIARITIES ARE FULL OF INTEREST.

**T**HOUGH of hoary antiquity in the country of its origin, *L. Alexandræ* is a modern plant to Western nations, and there must be many gardeners who remember its *début* in this country, nearly thirty-two years ago. It made a great stir at the time, and was involved in a piquant air of mystery which must have proved diverting to Japanese botanists

and bulb merchants. Curiously enough, two nursery-men were concerned in the introduction of this lily to the public at the Royal Horticultural Society's exhibition at Chiswick on July 11th, 1893, Messrs. J. Veitch and Sons exhibiting it as a species — *L. Ukeyuri* — and Messrs. Wallace naming it *L. Alexandræ*, provisionally. At that time no one here seemed to know anything of the history of the plant, or if they did, the knowledge was not divulged. At any rate, in the cloud of doubt as to the identity of the lily, someone conceived the notion that it was a hybrid between *L. auratum* and *L. longiflorum*. It has not been possible to discover how the notion originated, but the Yokohama merchants were probably blameless in the matter, since they sent it here under the name by which they knew it — *Ukeyuri*, literally the lily of Uke-shima (island), one of the Liukiu group of islands south of Japan, and it had no mystery for them. To some extent the notion may have been fostered by J. G. Baker, for in the account of the Chiswick meeting in the *Gardeners' Chronicle* of July 14th, 1893, Baker was reported to have expressed the view that it was a garden hybrid. In the account in *THE GARDEN* of the same meeting, we read that "*L. Alexandræ* is supposed to be a cross between *L. auratum* and *L. longiflorum*. It is quite distinct, and judging from several plants exhibited, a useful and certainly a handsome lily. The flowers are large, open and of the *auratum* character."

Again, "The hybrid character is well depicted in both leaf and stem, the latter partaking of *auratum* in its formation and colour, while the leaf character partakes of *auratum* and *speciosum* . . . and in the firm substance and horizontal aspect of the leaves there would appear a touch of *L. longiflorum*." Then, in the *Gardeners' Chronicle* for July 22nd, 1893, after closer study of the plant, Baker gave it the *imprimatur* of a formal description, not, however, as a hybrid, but as "obviously a variety of *L. japonicum*, Thunberg." And there, technically, it has remained since, fitting ill into the place assigned to it, yet still unable to rid itself of the legend which makes it a mongrel.

The air of mystery which surrounded the plant when it was first introduced was deepened some years later by Dr. E. Bonavia, who, on June 25th, 1904, wrote in the *Gardeners' Chronicle* that a bulb of *L. Alexandræ* which he had flowered in a pot for some years, had split up into two and that while the flower of one was pure white, the petals of the other were a

beautiful rose colour with white margins and a crimson stripe along the midrib. Dr. Bonavia suggested that if the lily were a hybrid, one of his bulbs had reverted to the colour of one of the parents. In July of the following year, the doctor wrote again that he had flowered two bulbs of the red variety of *L. Alexandræ*, adding his belief that the white-flowered lily was not of hybrid origin, but was probably an albino form of the red lily. It did not seem to occur to anyone at the time that, following J. G. Baker, Dr. Bonavia was confusing *L. Alexandræ* with *L. japonicum*, but that does not make the transformation of the colour of the flower from white to pink (or red, as the doctor called it), any less remarkable. Since Baker's day, there has been ample opportunity to clear up the history of the plant, probe its legendary origin and place it definitely among the natural forms of *L. longiflorum*. Normally, *L. Alexandræ* or *L. longiflorum* var. *Alexandræ*, as it should be called, holds its flowers in superhorizontal fashion, tending to a semi-erect position, corresponding to the angle at which *L. regale* usually holds its flowers, but sometimes the flowers assume an upright position. The peculiarity, if we may call it such, is evidently an old one as in "*Zôho-Chikin-Shô*," a Japanese book published in 1710, which Mr. Takeda showed to the writer in 1911, there is a drawing, obviously of the plant we call



A DEFORMED TYPE OF *L. AURATUM* WITH UPRIGHT FLOWERS RESEMBLING *L. ALEXANDRÆ*.

*L. Alexandræ*; the Japanese, too, call the plant the Upright Lily, and when he published this lily as *L. nobilissimum* in the Tokyo Botanical Magazine in 1914, Mr. Makino reproduced this old illustration. All this was a little confusing till it was realised that the vertical position was no more normal than in the case of *L. auratum*, in which, and in typical *L. longiflorum* as well, the upright position occurs now and then, usually in uni-flowered specimens.

Many years ago, in conversation with the writer, Mr. Alfred Unger of Yokohama, who was well versed in all that pertains to Japanese lilies, repudiated the idea that *L. Alexandræ* was of hybrid origin. It was found, he said, on Uke-shima and other of the Liukiu islands, and though not exported till 1893, had been known to the Japanese for centuries. The



flower is shorter than in typical *L. longiflorum*, and more widely open; the petals are paper-white and of substance, without blemish or markings, slightly reflexed at the tips; the inside of the trumpet is tinged with the green of the young apple leaf. The fragrant flower is of refined character, recalling in a way a much enlarged edition of that of the white

rhododendron Griffithianum. A peculiarity of the leaves is the claw or petiole by which they are attached to the stem. The plant figures regularly as *L. Ukeyuri* in the Japanese bulb catalogues, and its cultivation is not difficult in those parts of this country where it can be prevented from spearing through the ground early in the year.

## BULB NOTES

### HYACINTHS AND WOMEN'S INSTITUTES.

MEMBERS like to feel they are doing something. Local branches round about where I live went in for growing the old-fashioned Dutch hyacinths last winter, and had exhibitions of the results at one of their usual monthly meetings. I was the judge on one occasion and was very impressed with the keenness of the members. I mention this in case the idea is local rather than general. It is an idea for any branch that has not tried it. No bulbs are as easy to manage in pots as Dutch hyacinths. They are a cottager's bulb every bit as much as a pelargonium is a cottager's plant. In case this note puts a match to a smouldering fire, I am going to suggest half a dozen varieties which are suitable and easy to manage. They are *L'Innocence*, white; *Menelik*, dark blue; *Grand Maître*, medium blue; *Perle Brilliant*, pale blue; *General Pelissier*, red; and *Lady Derby*, rosy-pink. In case a pale pink is preferred to such a very dark blue as *Menelik*, I would suggest *General de Wet*. I do not think it is necessary to buy first-sized bulbs. If good second-sized bulbs are obtained from a reliable source I find they are quite good enough for ordinary people, and just as much pleasure and fun can be got out of them. If it is intended to have a little competitive exhibition in the spring, may I suggest that one bulb only in a pot should be the strict rule. I know what a job it is to judge when it is otherwise. When, that is, from three to five bulbs are grown in one receptacle, and these are not all the same variety.

### EARLY PERFECTION POETAZ.

I must again refer to this splendid variety. I saw a little exhibit of it at the first special show in March last at the Big International Exhibition at Heemstede. It looked well, but it was really past its best, which, of course, is an eloquent and silent testimony to its earliness. One of the owners of the stock gave me a postcard picture of it growing in their bulb fields. There was a very big mass of it, but the world is big too, and there may not be enough to go round. I hope, however, there will be some in British catalogues this next autumn. It has a white shapely perianth with a yellow cup and from my own experience I can say it is free-flowering and *very easy* to get into bloom about mid-January.

### CROCUS "QUEEN OF THE BLUES."

Seekers after novelty and size will find this a real treasure. I have heard it said that "Finality is the only heresy." However this may be in a theological sort of way, it is certainly true horticulturally. Pick out the very largest

variety you know in 1925, in a few years time it will have its nose put out of joint and it will have to take a lower place. *Queen of the Blues*, which I think is a 1925 novelty, will do to go on with for a while. There may be varieties with larger blooms, but I have not seen them; nor in the course of conversations have I come across anyone who has. If, however, size were its only recommendation, it would not be mentioned here. It is of a very charming shade of what in crocusdom is called blue—a sweet-toned, many-shaded mauve in the language of the world. Of its early-flowering habit there is no doubt. Its value in this respect must depend upon the weather—according to mild, sunny spells synchronising with the blooming time of *King of the Blues* or not.

### HYACINTHS AT THE INTERNATIONAL.

The fine display of hyacinths by the community of Overveen at the first of the series of special shows on March 12th was at once of historical and botanical interest and of present day utility. The historically minded could feast their eyes on such ancients as the quaint double yellow *Goudbeurs* (*Purse of Gold*); or the rosy *Hofdyk*, with each of its bells tipped with a little green, which gave it a decidedly piquant look which to me was very pleasing; or, again, the pale pinky buff *Tamerlan*, which is a pale pink toned primrose, a little washy-looking, perhaps. These they could compare with some of the very latest out, like the fine distinct yellow, *Prince Hendrick*, with its narrow segmented blooms; or the exquisite pale blue toned mauve *Pride of Holland*, or *Daybreak*, a striking rosy apricot, not a hundred degrees removed in colour from my old favourite *Orange Boven*; or, if one went to the long corridor, where a collection of seedlings was staged, there were many there which were still a long way off being in commerce. I had the opportunity of discussing them with one of the big hyacinth men of Holland and his comments on my "spots" made it abundantly clear that present day vendors are going for tight spikes and pale colours. I singled out a big-flowered rich deep Oxford blue here and there relieved with white shading as my choice. My mentor said, "no good, too dark," but the owner of the group said that most people had gone for it. There were many choice varieties, among others *Spring Glory* (white), *Competitor* (large rose after *La Victoire*), *Salmon Queen* (salmon pink), and *Louis Paster* (deep blue).

Botanically, it was interesting to see how some varieties had sported. The hyacinth in this respect may be compared with the chrysanthemum. Both are

old hands at the game. Just as Marie Masse has given us several distinct colour variations, so has the well known *King of the Blues*. Some of these were represented in the big Overveen collection. I noticed *Codra*, almost the latest effort of the old "King" (in which it has taken on a double form), *Ivanhoe*, *Purple King*, *Queen of the Lilacs* and *King of the Violets*. *Grand Maître* (a blue), is also a big sport. Two lovely ones in the group were *General de Wet* (pink) and *Pride of Holland* (pale mauve). I am told that the explanation of the sporting in the two families is not the same. In the hyacinth it may have to do with the dropping out or the addition of one or more factors, while in the chrysanthemum it is a bud from a different layer of cells from the ordinary which suddenly takes it into its head to assert itself. I wish some one would explain this sporting properly and popularly. Thanks to the Baconian assiduity of our modern Bateson much has been found out, but an interpreter seems necessary to put his knowledge in such a way that it may be easier for the hypothetical man-in-the-street to digest. Will some one tell us about this sporting?

### TULIPA OCULIS-SOLIS.

As I write, on the last day of March, my clump of *Tulipa Kaufmanniana* is past its best and my clump of *oculis-solis* is about half out. It gives a welcome bit of bright colour at this time of the year and under favourable conditions can look after itself. Two years ago I saw it in Messrs. Veitch's nursery at Exeter, where it had become acclimatised and had sown itself in several places. All anyone has to do if they feel doubtful about its behaviour if left in the ground for the summer, is to lift it at the same time as one lifts other tulips and re-plant it in early November. The petals have a pale look on the exterior as if some thin, light-coloured wash had been painted over them. The interior is a crimson or carmine (for the shade of red varies), with a large well defined black base and a symmetrical edging of yellow more or less almond shaped on each petal. *Præcox*, which is somewhat similar in its general appearance, is said by botanists to be a form of *oculis-solis*, but may be distinguished by its having the exterior of the petals a good solid, dull carmine and the basal blotch not such a dead black and with a blurred yellow edging. It is, too, rather the earlier to bloom. One or the other of the above-mentioned species are very welcome additions to a spring flower garden, as they lend a distinct tone of valuable bright colours which are so rarely present during these early weeks.

JOSEPH JACOB.



# PLANT HOLIDAYS—I

BY H. STUART THOMSON

NO ONE KNOWS WHERE THE ALPINE FLORA CAN BE SEEN AT ITS BEST SO WELL AS MR. THOMSON, AND IN THIS AND THE NEXT ISSUE HE DESCRIBES VARIOUS CENTRES WHERE A PEACEFUL HOLIDAY MAY BE SPENT OUT OF THE WAY OF THE ORDINARY TOURIST TRAFFIC.

ASKED to write an article on some of the best districts for plants in the Alps and Pyrenees, I find it difficult to know where to begin, or end. Moreover, as the only parts of the Pyrenees I ever visited are in the Eastern Pyrenees: Vernet les Bains, Mont Louis and Cambras d'Aze, and thence down the valley of the Aude to Carcainères and through the Defile of St. George to Quillon, very little could profitably be said which has not been published in these columns by botanists and collectors who have more recent knowledge.

Let us therefore pass to the Alps, where the hotels are better, even the smallest of them, the flowers at least as beautiful, the country more accessible, and where reliable and intelligent guides and porters are to be found in almost every village, particularly in the Swiss Alps.

But before reaching the Alps proper, there is in the extreme south, at the back of Marseilles and Toulon, the wonderfully picturesque limestone Chain of Sainte-Baume, which is a locality very rich in southern plants and scarce sub-alpines and hardly known to Englishmen. It may best be approached by diligence from the market town of Aubagne, just east of Marseilles, to the village of Gémenos at the foot of the mountains. June is the best month to visit this enchanting country, and fair accommodation may be obtained in several small French hotels on the plateau (Plan d'Aups), and there is an older and larger hôtellerie at the farther or east end of the plain. Plan d'Aups is at a slightly lower elevation than the Col de Bertagne (3,000ft.), which one passes in walking up the extremely interesting slopes from Gémenos. The range of mountains attains about 4,000ft. above the sea; and on some of the rocks on the north side several saxifrages, *Silene Saxifraga*, *Daphne alpina* and other alpines intermingle with the more southern species.

Just above Gémenos there is a sawmill by the roadway, and from this mill is a shady path through a remarkable grove of Judas trees (*Cercis Siliquastrum*) and Holm oak (*Q. Ilex*). The Aleppo pines, which are at first dominant, pass into Garigue, the Provençal name for the shrub association of limestone hillsides. Amid the pines the following Mediterranean plants are frequent: *Rhus Cotinus*, *Pistacia Terebinthus*, *Coronilla juncea*, *spartium*, *Cistus albidus*, *Teucrium Polium*, the queer little blue *aphyllanthes* and the porcelain blue *Linum narbonense*. Higher up are *Lathyrus latifolius*, *Astragalus monspeliensis*, *coris*, *Stipa penanta*, *Leuzea conifera*, *Cephalanthera rubra*, *Pyrethrum corymbosum*, *Antirrhinum latifolium*. At just above 2,000ft. the handsome *Vicia onobrychioides*, *Helianthemum polifolium*, *genistas* and *orobanches*, *Bartsia latifolia*, *Allium roseum*, *Limodorum*, *Catananche cœrulea*, *Epipactis atrorubens*, *Teucrium aureum*, *Arenaria capitata* and *Linum salsoloides* are among the plants to be seen in greater or less quantity.

On a grassy plateau before arriving at the Col, the deep blue shrubby *Lithospermum fruticosum*, very similar to *L. prostratum*, will be noticed. The vegetation of the Pass is especially noteworthy for small prickly undershrubs and greyish plants, simulating the broken limestone upon which they grow. When at Sainte-Baume at the end of June, 1913, a band close to Plan d'Aups was covered with *Lathyrus canescens*, one of the loveliest peas, with large pale purple flowers.

In the pine woods of the plateau are other interesting plants, and a greater variety can be seen in the great Forêt domainale de Ste. Baume, said to be one of the most interesting mixed forests in Europe. Tansley refers to it in his "Forests of Provence" in the *Gardeners' Chronicle*, 1912. The undergrowth is similar to that of a limestone wood in Switzerland, and comprises *Lithospermum purpureo-cœruleum*, *Ruscus aculeatus*, *A. Hepatica*, *Coronilla Emerus*, *Lilium Martagon*, etc. Among shady rocks at about 2,500ft. the handsome *Saxifraga lantosca* reaches its western limit in Europe. Another rare plant, *Senecio Gerardii*, only known in France and much like a green-leaved *S. Doronicum*, may be looked for on the ridge leading to the Croix aux Béguines, where the

flora is very rich; and the rocks of the Col du Pillon are clothed with the rare silvery *Paronychia capitata* var. *Kapella*.

The Sainte-Baume range forms an attractive and quite unique place for the flower lover to visit on his return from a late spring sojourn on the French Riviera, or if he finds himself in May or June at Marseilles or Toulon with a few days to spare. Further information can be found in a paper by the writer in the *Gardeners' Chronicle*, 1915, page 49, *et seq.*, or in Dr. Mader's "Le Massif de la Sainte-Baume," in *Malpighia*, Vol. xx, 1906.

The Maritime Alps have the advantage of being accessible to the plant collector perhaps a month earlier in summer and later in autumn than the Swiss Alps. The alpine, or Argentera, district west of the Col d'Altaïre, is separated from the lower Ligurian mountains, which are more Apennine in character, by the famous Col di Tenda, over which the great road runs from Nice to Cuneo and Turin. I believe the railway is now continued through the Col di Tenda southwards to S. Dalmazzo and Ventimiglia.

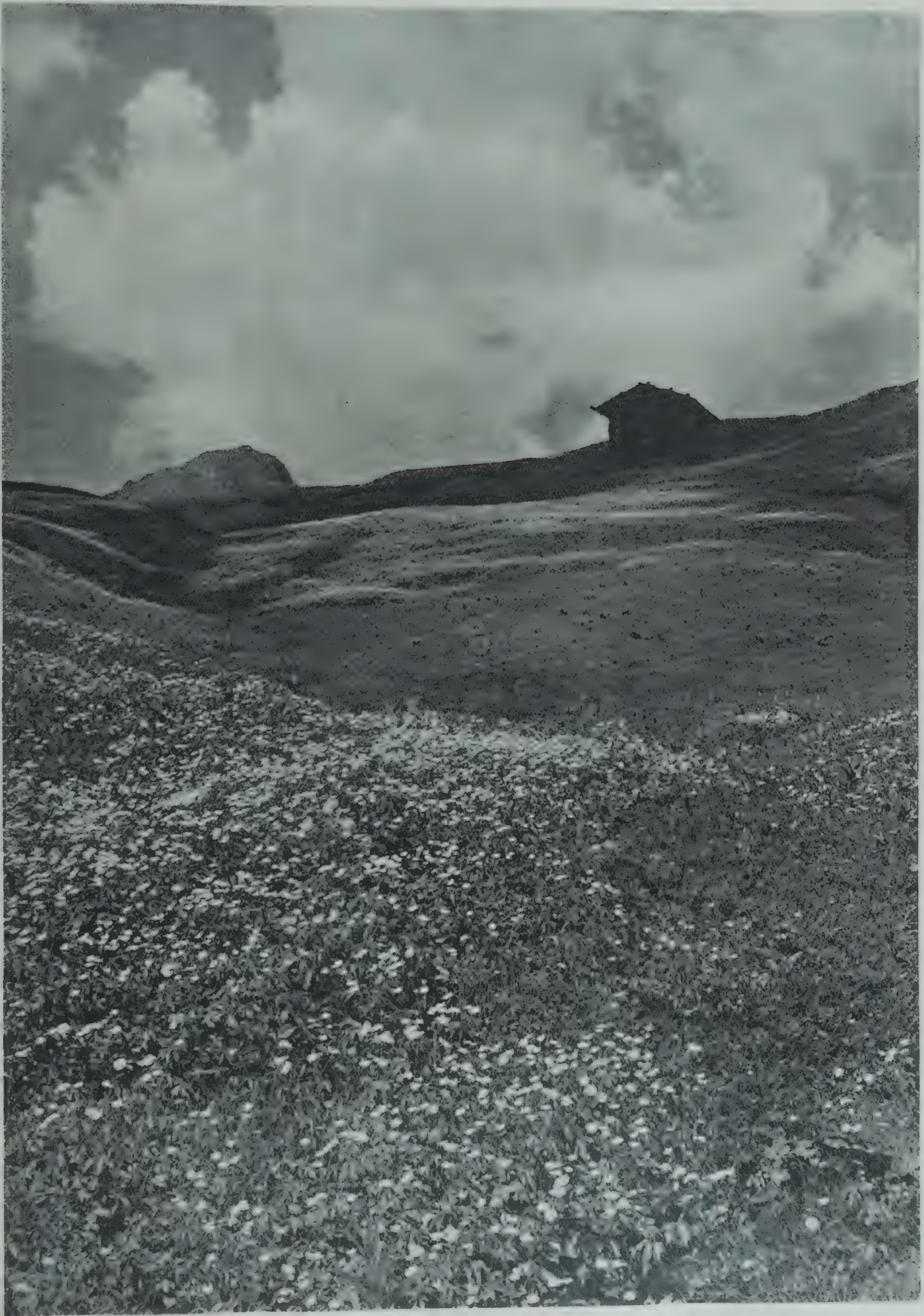
Among the Ligurian hill villages above Bordighera a week or two in June might advantageously be spent at Pigna (Hôtel de Paris), which is prettily situated among olives and sweet chestnuts, 1,000ft. above the sea. Bajardo is another village a little higher. The chestnuts extend to about 3,000ft. on Monte Toraggio, where they give place to pines and larches; and the olive reaches about 1,800ft. in this district. Visitors should take with them the late C. Bicknell's useful little "Flora of San Remo and Bordighera," 1896. Two interesting ferns *Cheilanthes odora* and *Pteris cretica*, are well established near Pigna; and the three handsome lilies, *LL. croceum*, *pomponium* and *Martagon*, adorn some of the grassy slopes. *L. pomponium* grows up to 6,000ft. on some of the mountains, as on Monte Wraggio, a beautifully proportioned rugged mass, whose upper slopes in June, before the pastures are mown, afford a host of brilliant flowers. These alps, extending to 6,000ft. on Toraggio, are bedecked with gentians, anemones, *Orchis globosa*, *ustulata* and *sambucina*, *Cerinthe minor*, *Narcissus poeticus*, *Pedicularis comosa* and *P. gyroflexa*. There are some big patches of peony on the highest slopes, and on the rocks are various saxifrages, including the endemic *S. cochlearis* and the even more beautiful *S. lingulata*.

San Dalmazzo di Tenda, 2,284ft., is a village with a good Italian hotel, beautifully situated at the junction of two lateral valleys with the main valley, which I can strongly recommend for a longish stay in June or July. I can remember nothing against it at midsummer except the flies, but against such pests could be put the charm of the fire flies in the evening. San Dalmazzo wants the pen of a Farrer or the poetic genius of a Correvon to do it justice; but I think our late friend R. Farrer knew St. Martin Vésubie (formerly called St. Martin Lantosque), better, and he certainly wrote more about it in "Among the Hills." San Dalmazzo has greater variety however. A step across the road leads into the shade of an ancient chestnut grove in which are brilliant campanulas, *Astrantia major*, *Epipactis atrorubens* and *latifolia* hybridising, *Thalictrum minus* and *Cephalanthera rubra* 2ft. high. On the rocks by the roadside are pinks and *helianthemums* in variety, *Lilium croceum* and the white-rayed *Orlaya grandiflora*. Across the river are limestone cliffs and scree where many good things are to be found, including *Micromeria piperella*, *Potentilla saxifraga*, *Asperula hexaphylla* and *Thymelæa dioica*. Butterflies of many kinds are also numerous.

Among the rocks and thickets above the road to Briga, a delightful village and suitable place to get tea on a hot afternoon, the handsome spikes of *Delphinium fissum* may be seen if well searched for, and the curious *Telephium Imperati*, which botanists were long doubtful how to classify, grows on the roadside wall and among broken limestone. Here also are *Inula montana*, *Vicia onobrychioides* and the two trigonellas, *TT. monspeliaca* and *gladiata*.

(Photograph by permission of the Swiss Federal Railways.)





A TYPICAL ALPINE MEADOW IN THE HIGH HILLS, WHICH IN EARLY SUMMER  
IS ALWAYS CARPETED WITH FLOWERS.



# THE SELECTION OF A LAWN MOWER

WITH NOTES ON ITS UPKEEP

IN initial outlay the mowing machine is perhaps the most expensive single item in the whole range of garden appliances, and there can be no doubt that the selection of a reliable machine is a matter which requires careful consideration. "Penny wise and pound foolish" is an old, but very true, saying, and the small saving which is often effected by the careless purchase of a cheap machine of doubtful origin usually proves to be very false economy. A bargain (?) of this nature is seldom, if ever, satisfactory, and the money saved in original expenditure is generally quickly swallowed up by bills for repairs and replacements. Nor does the question of expense entirely disappear with the purchase of the machine. Even though one buys the finest type of machine obtainable, a lot will depend on the manner in which it is treated if the cost of upkeep is to be kept low and the standard of efficiency high. More damage can, undoubtedly, be done in a few weeks by faulty adjustments, careless usage, slovenly inattention, amateur tinkering, etc., than by many seasons of fair and honest work. Cleaning after use is an operation which takes but a very few minutes, and should never be omitted. One cannot expect good service or light running from a machine when the bearings and gears are clogged with mowings and dirt, or the cutting knives dulled and rusted from constant contact with wet grass. In spite of this, many people are content to keep their machine on about the same level as their dustbin. Cleaning, if done regularly, is a simple task, but it nevertheless adds 100 per cent. to the efficiency of the machine when in use. An old spoke brush is one of the handiest things for removing most of the dirt and clippings, while a disused tooth brush, or even a thin piece of wood, will serve to reach the more inaccessible parts of the mechanism. After cleaning, wipe all parts, particularly the knives, with an oily rag and give the bearings a slight lubrication with a good oil. Use an oil which is neither too heavy nor too light in substance and, above all, use it regularly. The main object of oil is to lubricate the bearings and keep

them from running hot and dry. It is not intended to be used as a bath, and to scatter it lavishly over all parts of the machine will be found an expensive procedure. The result of this can often be seen in filthy blotches of grease dropped here and there on the grass when the machine is in use. Superfluous grease also acts as a magnet to dust, a fact which will be quickly realised when cleaning takes place. Use oil sparingly but regularly when the work is actually being done, and see that what you do use goes in the right place. Every hour is not too often to use it when the machine is running, and the beneficial effect will be felt by those in charge.

Accurate adjustment is necessary for good work, and the short time spent in obtaining this will be found worth while. It is essential that the cutting edge of the knives should rotate in perfect alignment with the shear blade, otherwise the lawn will assume a ribbed effect after mowing. In most of the modern types simplicity of adjustment is an important feature, so that this problem should not present many difficulties to the majority of people. Prior to and during mowing operations a sharp look-out should be kept for stray stones and other foreign matter, which, however careful one may be, often find a resting place on the grass. They should be immediately removed or serious damage may be done to the blades and mechanism if they come in the path of the machine when working.

Many methods have been advocated for sharpening dull blades, but in practically all cases they can only be described as unsatisfactory. This is a job which is beyond the power of the average handyman, who, as a rule, is capable of making more noise with a file or grindstone than he is of performing this delicate operation correctly. It is perfectly correct to say that it is no more sensible to attempt the sharpening of these blades with a file than it would be to try setting one's favourite razor by the same method. To grind a rotary cutter accurately demands considerable skill and the use of an elaborate plant. This can seldom be obtained locally, and in most cases it will be wiser to return the mower periodically to the original makers, who can always be

depended upon to make a thorough overhaul in a skilful manner.

The many types of horse, hand or motor-power machines on the market

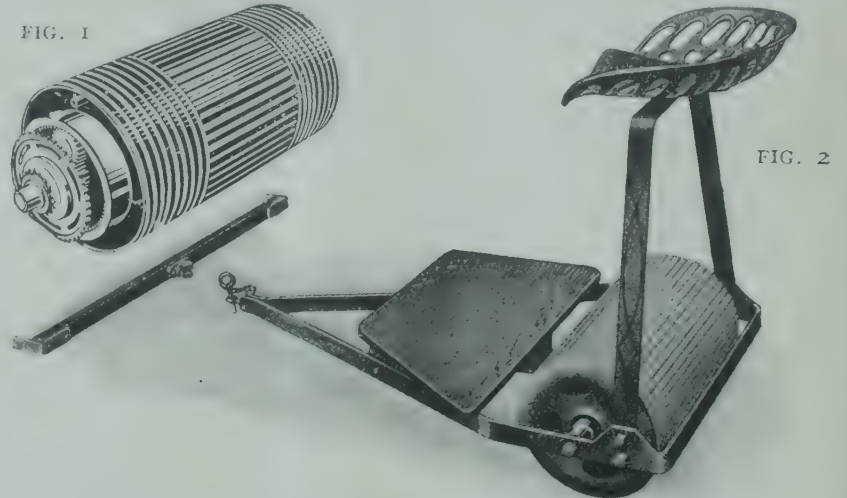


FIG. 1, THE "GOVERNOR" LAND ROLLER. FIG. 2, THE "DENNIS" TRAILER WITH ADJUSTABLE SEAT.

to-day offer a very wide field from which to choose, and the final selection will, of course, be governed by the size and nature of the lawns on which the mower is to be used. For those who already possess a trustworthy machine but who feel that hand mowing is too tedious and fatiguing, there is the choice of an "M. P." or a "Rendle" motor attachment, either of which can be fixed very easily to most standard makes of mowing machine or roller. Each of these consists of an independent power unit, the working of which is so simple that anyone can learn to attach or drive it in a few moments. All physical labour is abolished and the operator sits and guides the machine as it runs. A very large area can be covered in a short space of time, and the running charges of each are exceptionally low. The number of hand and pony machines is legion, and space will not allow of details being given regarding the faults or virtues of each one. Green's "Silens Messor" or "New Royal," Ransome's "Automaton" or "Lion," and Shank's "Caledonia" or "Talisman" are all very excellent types which are too well known to need description. Furthermore, they are made by firms who have specialised in the manufacture of mowing machines of all types. Others worthy of mention, whose makers are of perhaps more recent introduction to the gardening world, are the "J. P." and the "Qualcast Major." The former can only be described as a *model de luxe*, for all parts run on ball bearings, while the gears, etc., are encased in dustproof covers and run in oil. The roller is in three sections, which form a differential action when the machine is turning, thus preventing the tearing up of the turf. Both front rollers and rotary cutters are governed by two hand-wheels, which render adjustment a very simple matter. The "Qualcast" is not built on quite such elegant lines but is designed for good hard work, and



"M. P." PUSHING A MOWER AND PULLING AN ORDINARY GARDEN ROLLER AT THE SAME TIME.



all parts are guaranteed. All of the machines mentioned are British made and, quite apart from this excellent guarantee of good construction, this reduces to a minimum the trouble and expense of obtaining spare parts when required.

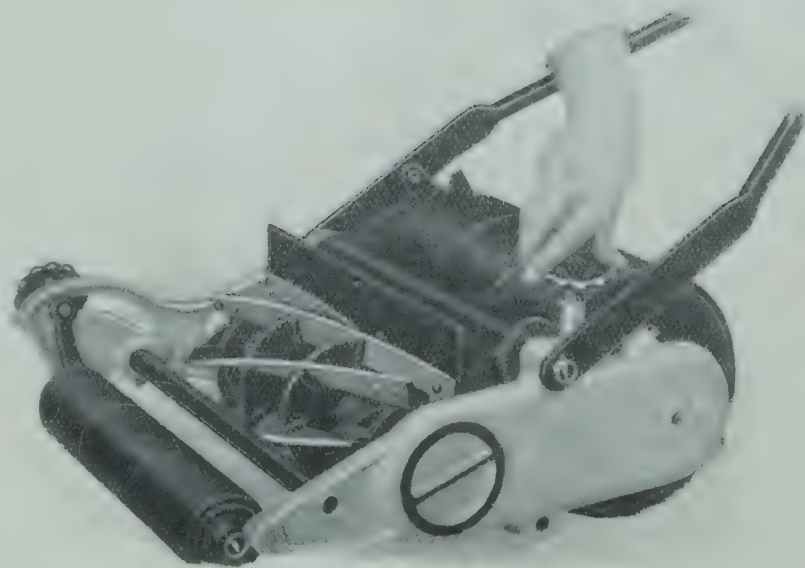
For cutting large areas the motor mower is gradually displacing the horse, pony and larger types of hand machine and, while at first glance the high prices charged for up-to-date models seem to render them prohibitive to all but the very wealthy, this is not the case. The additional outlay is usually saved during the first season by their economical working. With most types it is possible for one man or boy to mow an area of 1,000 sq. yds. in from fifteen to twenty minutes at the trifling approximate cost of 2d. for fuel. In this section we again find the names of Green's, Ransomes and Shanks prominent, for these firms, bringing their vast experience to bear upon the subject, have produced a very extensive range of motor machines for all purposes, ranging from 1½ h.p. to 4½ h.p. The lighter types of from 16in. to 20in. cut are eminently suitable for use on small sports grounds and private gardens, while the larger and heavier machines are more adapted for use on larger estates and parks. The choice is by no means limited, for the

following are all very excellent machines:

The "Atco" is a product of Birmingham. An important feature of this machine is the fact that provision has been made for fitting a special turf cultivator, to be used in conjunction when mowing for the purpose of aerating the grass.

The "Governor," made at Wolverhampton, has many outstanding features. One of the main points is the cross serrations on the land roller, which, as shown in the illustration on opposite page, is a three unit item. This undoubtedly provides a great safeguard against skidding, slipping or otherwise tearing the turf when turning or working on sloping ground.

The "Dennis," manufactured by the famous firm of motor lorry and fire engine fame, hails from Guildford. It is, from



THE HANDWHEEL ADJUSTMENTS IN THE "J.P." MOWER.

all points of view, a machine which can be relied upon to give every satisfaction.

In most cases the motor controls are conveniently fixed to the handles and a clutch fitted to throw the rotary cutter out of gear when the machine is wanted for rolling only. A trailing seat can be purchased for use with most makes if this is thought necessary. J. C.

## ALPINE PLANTS AT VINCENT SQUARE

AS befits the season, alpine plants were an important feature of the Royal Horticultural Society's Show at Vincent Square, Westminster, on April 21st and 22nd, and a large and varied collection was shown either as pot plants or, more naturally, set in groups and drifts in small rock gardens.

Although the exhibit was of pot plants and pans, the fact that these receptacles were set among small pieces of rock gave the large collection from the gardens of the Hon. Vicary Gibbs, Aldenham House, Elstree, an appropriate setting. The beauty of the exhibit was also enhanced by the mounds of deciduous azaleas which pleasantly relieved the general line of the alpine. *Azalea Yodogawa* Double Mauve is an attractive shrub, about 2ft. high and well furnished with relatively large flowers; while the batches of *Azalea Amœna* varieties provided agreeable colouring. The central alpine was a large pan of *Primula denticulata*. Other attractive examples of the same genus were *P. chionantha*, of fairly robust habit and nearly white flowers; the yellow *P. Forrestii* and, *P. rosea grandiflora*, a valuable variety of a beautiful species. The saxifrages included Aldenham Pink, Dr. Ramsey and Letchworth Beauty. There were various anemones, the bright single red *Bellis sylvestris*, a delightful form of *Androsace carnea* Laggeri and a most attractive little bush of *Daphne neapolitana*. This fine exhibit received a gold medal.

Next in point of interest was a collection from Mr. Clarence Elliott. Although we did not care for its concrete bordering, we were charmed with the breadths of lovely white-eyed blue flowers of *Gentiana verna*, and, realising the use of the receptacle, we forgave its ugliness. At the other end there were some plants of *Viola Bluestone*, whose name is quite descriptive of the uncommon shade of dark blue colouring. *Petrocallis pyrenaica* was a desirable plant, though the principal feature was the auricles, which were most fascinating. Mrs. Wilson,

pubescens Ladybird, Zuleika Dobson, were all of great decorative value. Among the saxifrages there was an admirable pan of *Griesbachii*, which in its uncommon habit and colour of the flower stems was only approached by the pans of *S. Gusmusii*, shown by Messrs. R. Tucker and Son, who also had two fairly uncommon daphnes in *D. rupestris grandiflora* and *D. Cneorum alba*.

*Armeria cæspitosa* is a sturdy little thrift which blooms very freely. Among other growers Messrs. W. H. Rogers showed it and they also had a good batch of the dwarf blue-flowered *Iris azurea*. The dwarf irises were well shown by Messrs. Barr and Sons; whose plants, only a few inches high, bore quite large flowers of considerable beauty. *Iris obliensis* Socrates, *I. pumila cœrulea*, *I. elegans* and *I. lutea maculata* are the names of only a few of them.

The daisy-like *Helichrysum bellidioides* which was shown by Messrs. Carter Page and Co. is a pretty little plant of spreading habit. They also had the charming little *Cyclamen repandrum* and *Primula farinosa*, which seemed almost like a smaller and hardy variety of *P. malacoides*.

A couple of perfect little bushes of the delightful *Daphne Cneorum* were included in his exhibit by Mr. F. G. Wood, who also staged the dark blue flowers of *Muscari paradoxa* and the very quaint *Fritillaria pyrenaica*. The most uncommon snake's-head lily in the Show was *F. latifolia*, of almost evil yet fascinating appearance. This and the greenish-flowered *F. acmopetala* were brought from the noted Collesbourne Gardens by Mr. W. H. Walters, with other rare and interesting plants. *Euphorbia sikkimense* is very attractive in the vivid colouring of the stems and on the midribs of the leaves. *Morea spathacea* is much like a slender, graceful iris. Although not hardy, the long tubular flowers of *Cantua buxifolia* were most beautiful. This is a cool greenhouse climber which will thrive in a northern aspect.

Many years ago some gardeners grew it in large pots trained as umbrella-shaped specimens, a method which showed off the uncommon flowers admirably.

Besides a great many rhododendrons of the type associated with the warmer parts of the country, Mr. G. Reuthe brought, in a pan, several plants of *Rhododendron kamtschaticum*. This is of exceedingly uncommon appearance. The almost minute, deciduous bushes are of delicate appearance, and they throw up stems only a couple of inches or so high, crowned with relatively very large saucer-shaped flowers of bright rosy purple colour. *Sanguinaria canadensis* is an elegant white blossom of windflower-like appearance. *Calypso borealis* was another attractive plant in the same exhibit, which also contained a brilliant mass of *Anemone fulgens*.

Vivid colour in dwarf plants was also provided by the masses of a red daisy well named Ball of Fire and shown by Messrs. B. Ladhams, Limited. Alice, delicate pink; and Shirley, a deep pink, are good companion sorts.

The dwarfiest of brambles was to be seen in *Rubus arcticus* on Mr. M. Prichard's stand. It is only a couple of inches or so high and crowned with round rosy flowers; a drift in the rock garden would be exceedingly effective. He also brought a fine batch of the lovely blue *Gentiana acaulis* and *Æthionema Warley*.

*Ranunculus amplexicaule*, a graceful white buttercup, which is relieved by the yellow centres, was shown by Messrs. Waterer, Sons and Crisp, who also had an attractive variety of *Fritillaria Meleagris*, *Shortias*, *Aubrietia rosea splendens*, and *Saxifraga bathoniensis*.

Messrs. Blackmore and Langdon were exhibiting a fine strain of polyanthus. The sturdy plants carried a mass of bloom, some flowers measuring nearly 1½ ins. across. There were yellows, whites and velvety



crimsons, and a flame-coloured polyanthus streaked with yellow was very attractive. Messrs. John and A. H. Crook had a varied collection of polyanthus. The substance and shape of the flowers were noticeable rather than the size. Large-sized flowers are not always a meritorious feature in polyanthus. This firm were showing a very good deep crimson polyanthus, with a well defined and clear yellow eye. Mr. G. A. Miller also was showing robust and well grown polyanthus of a good strain.

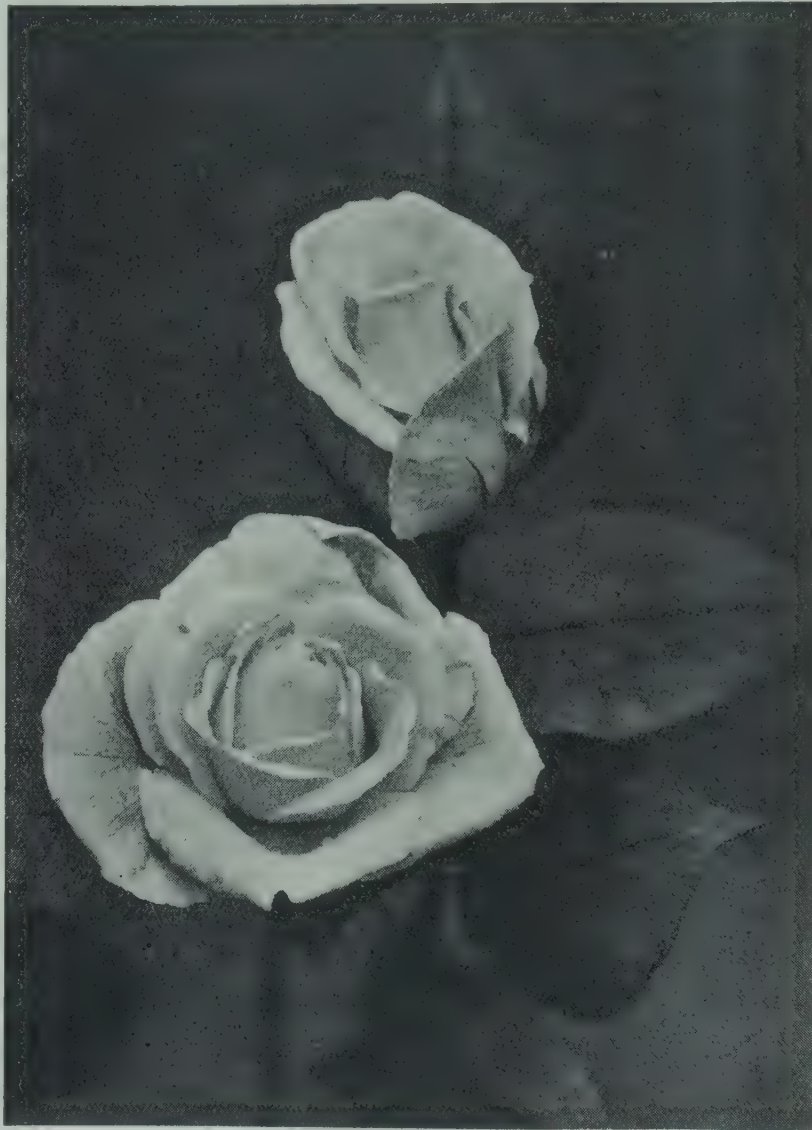
A striking effect was produced by Messrs. Sutton and Sons' excellent exhibit of May-flowering and Darwin tulips. A large oval bed filled with many varieties of both classes in exquisite colouring showed to great advantage the elegant form of these tulips. The colours were vivid and yet not harsh, and the stems of nearly 24ins. long supported large, well shaped flowers. By combining May-flowering and Darwin tulips a more varied colour effect was produced, for some beautiful yellow and bronzy orange May-flowering varieties, such as Bouton d'Or, Inglescombe Yellow and Bronze Queen, were included, whereas if only true Darwin tulips had been used there would have been no yellows. King Harold was a fine deep crimson Darwin; and Farncombe Sanders, a rosy red, was about the longest-stemmed variety exhibited. With the exception of Prince of Wales and Rev. Ewbank, all the varieties exhibited were exceedingly beautiful and formed a wealth of colour. Among them were Afterglow, a charming shaded apricot; Le Reve, a pinkish shot-silk colour; City of Haarlem, a crimson variety with a white edge; and three May-flowering tulips—Bacchus, a deep wine colour; Grenadier, a brilliant scarlet; and Panorama, an unusual bronzy red. King George V, a lovely cherry red; Zomerschon, a white streaked with cerise; Princess Elizabeth, Orient and Prince of Orange were a few more of the best varieties.

The reason that only a few roses were exhibited at the Hall this week and that some of these were not in first-class condition, is that the majority of rose growers are saving their best for the National Rose Society's Show on April 24th. One rose which attracted particular attention is a comparatively new variety, raised by Mr. Walter Stevens and exhibited by Messrs. Stuart Low and Co. This variety, called Roselandia, is a sport from Golden Ophelia, but has a larger flower, the colour is deeper and the stems are stiffer and more upright. The pointed bud is deeper yellow at the base. It will probably be a very popular variety in the near future. Messrs. Stuart Low and Co. were also showing healthy and fine specimens of such varieties as Padre, Sovereign, Phoebe and Mrs. Beatty. Messrs. Benjamin R. Cant and Sons were exhibiting Lady Wakefield, an excellent rose of a salmon-pink shade and sweetly scented, but its fragrance did not rival that of its neighbour, the well known variety Covent Garden.

Dwarf polyantha roses in pots, grown as bushes or standards, are very decorative and are profuse bloomers. A good exhibit of this type of rose was shown by Messrs. Cutbush and Sons, who included in their collection such varieties as Edith Cavell, Orange King, Salmon Queen, Orleans Rose

and Tausendschön. Orange King is quite a break in colour, the pinkish orange flowers are small and very dainty. Salmon Queen is a paler shade; and Orleans Rose is of a similar colour but darker, and so lacks that softness in tint which adds to the beauty of Orange King. Mr. J. H. Pemberton was also exhibiting dwarf polyantha roses. One of the best among his roses was Rudolf Khuis, a red form of Ellen Poulsen; the flowers seem to bloom quite as freely as Ellen Poulsen and at the same time are a little larger. Koster's Orleans, a brilliant red; Eblouissant, another red; Echo, a delicate flesh pink with crinkled petals; and Juliana, a coral pink, were all admired.

There was a marked improvement in the carnation exhibits. In general condition and in colour and size, the blooms shown were



THE PERFECTLY FORMED YELLOW BLOOMS OF ROSE ROSELANDIA.

much superior to those exhibited at Vincent Square during the past few weeks. The three well known firms of Messrs. Allwood Brothers, Messrs. C. Engelmann and Messrs. Stuart Low had good collections of well grown carnations. Topsy, Janet, Lady Hindlip, Sir Philip Sassoon, Edward Allwood, Shot Silk and Michael Stroop were some of the varieties exhibited.

Among the other exhibits were:

*Anemones*.—Messrs. R. Gill and Sons, and Reamsbottom and Co.

*Echiums*.—Messrs. Sutton and Sons.

*Fritillaria*.—Mr. W. H. Walters.

*Fruit*.—Messrs. Bunyard and Co., and Westmacott and Co., Limited.

*Greenhouse Plants*.—Messrs. L. R. Russell and Co.

*Hardy Plants*.—Mr. B. Ladham.

*Hydrangeas*.—Messrs. G. and C. Cuthbert

*Orchids*.—Messrs. Stuart Low and Co.

*Narcissi*.—Messrs. Barr and Sons, R. H. Bath, and W. F. M. Copeland.

*Primulas*.—Mr. J. Douglas.

*Rhododendrons*.—Messrs. R. Gill and Sons. *Shrubs and Alpines*.—Messrs. Cutbush and Hillier and Sons.

*Topiary*.—Mr. John Klinkert.

*Tulips*.—Maytham Gardens.

*Violets*.—Mr. Baldwin Pinney.

## NEW AND RARE PLANTS.

**HIPPEASTRUM PINK BLOSSOM.**—A magnificent variety bearing two large and showy flowers on a stout leafless scape. The flowers were almost 7ins. across and of good form. The spreading petals were of a delicate shade of pink shading to white in the throat. This variety is characteristic both from its colour and the beautiful markings on the petals. Award of merit. Shown by Sir George Holford, Westonbirt.

**HIPPEASTRUM ICEBERG.**—Another handsome variety bearing two beautiful white blooms. The spreading perianth segments, all equal in size, are pure white in colour, shading to light green at the base. Award of merit. Shown by Sir George Holford.

**HIPPEASTRUM BLACK BEAUTY.**—This variety bore two flowers slightly smaller in size. The segments of the perianth were of a dark red colour, which became darker towards the inside of the throat. The segments were all of the texture of what one might term a satiny velvet, lending to the flower a handsome appearance. Award of merit. Shown by Sir George Holford.

**STACHYURUS PRÆCOX.**—Flowering sprays of this hardy shrub, a native of Japan, attracted considerable attention. The flowers are borne from fifteen to twenty together in stiff drooping racemes which are from 3ins. to 4ins. long. The flowers are small and pale yellow in colour. Award of merit. Shown by the Hon. Vicary Gibbs.

**STACHYURUS CHINENSIS.**—The Chinese representative of the genus, introduced to this country by Wilson in 1900. There is little difference between the species, save that probably this species is less elegant than its Japanese cousin. The flowering sprays, bearing almost the same number of flowers as *præcox* and of the same length, were not so stiff, but more or less dangled or flopped from the branches. The flowers are again small and pale yellow in colour. Award of merit. Shown by the Hon. Vicary Gibbs.

**BERBERIS STENOPHYLLA COCCINEA.**—This variety of one of the most useful hybrids in the berberis family should prove to be a most useful one from the commercial point of view. The flowering sprays exhibited showed the grace of habit of the type combined with its floriferousness. The interlacing branches bear numerous flowers of a fine rich red colour which wreathes the stems from end to end. Award of merit. Shown by the Hon. Vicary Gibbs.

**PRUNUS SARGENTII.**—Flowering sprays of this most beautiful cherry merited the attention it received. The branches were laden with blossoms of a lovely deep blush pink colour in clusters of four to six. The flowers are carried on long stalks, from which they dangle gracefully. Each is typically rosaceous in shape, carrying stamens of a deep rose colour. It is undoubtedly one of the most handsome species we have in



cultivation in this country. First-class certificate. Shown by the Hon. Vicary Gibbs.

**RHODODENDRON SPÆRANTHUM.**—A delightful species of the *Cephalanthum* series discovered by Forrest in 1914. It is a dwarf, somewhat twiggy shrub, only reaching 2-3 ft. in height. The leaves are small and aromatic. Numerous small flowers of a whitish to rose colour are clustered together on the terminal branches, resembling a daphne. Award of merit. Shown by the Marquess of Headfort, County Meath, Ireland.

**RHODODENDRON ELSÆ.**—This is a hybrid between *R. grande* and *R. Falconeri*, which combines the graceful and excellent qualities of these two species. Large bell-shaped flowers 2 ins. or so across are borne in a somewhat tight truss. They are pure white in colour, with a deep wine-coloured blotch at the base. Award of merit. Shown by Mr. George Reuthe, Keston.

**RHODODENDRON MURIEL.**—This is another handsome hybrid, bearing large and fairly tight trusses of beautiful white waxen bell-shaped flowers. At the base of each of the petals is a deep crimson blotch. The petioles are characteristically hairy. The foliage is of the *Falconeri* type, being covered with a rust-coloured felt on the underside. Award of merit. Shown by Lady Loder, Leonardslee.

**RHODODENDRON GARNET.**—This is one of the Javanese hybrid rhododendrons between *R. javanicum* and *R. jasminiflorum* var. *Garnet*. It has all the characteristics of this class, forming a twiggy bush carrying loose trusses of deep red flowers which are flat

and spreading. It forms rather a fascinating pot plant, providing a good contrast between the deep colour of the blossoms and the light green of the foliage. Award of merit. Shown by Sir George Holford, Westonbirt.

**ROSE ROSELANDIA.**—A charming new variety, a sport from *Golden Ophelia*, upon which it is certainly an improvement—to be added to our already extensive list of hybrid teas. The well formed and large blooms are borne singly on long erect and stiff stems. They are of a sulphur yellow colour, deeper than the original, and have a slight fragrance. The habit of growth and the foliage are good, and showed the results of careful cultivation. It appears to be a free-flowering variety which should find popularity among rose enthusiasts. Award of merit. Shown by Messrs. Walter Stevens, Limited, Hoddesdon.

**IRIS WATTIL.**—A species which comes from Assam and south-western China, which shows an extraordinary habit of growth, long flowering stems, 2 ft. or more in length bearing a tuft of five to seven tiny strap-shaped leaves, being formed every year. These bear a branching inflorescence of white flowers. In shape they are similar to those of *Iris japonica*. The falls are characterised by bearing an oblong blade with a wavy edge, with a small orange blotch. The branching style is to be seen rising prominently in the centre of the flower. Award of merit. Shown by W. H. Walters, Cheltenham.

**GLADIOLUS MACKINDERI.**—This handsome variety bears a loose spike of flowers on stems almost 3 ft. in height. The flowers are of a

graceful form and are a delicate fiery red in colour. Award of merit. Shown by Sir John F. Ramsden, Bulstrode Park, Bucks.

## ORCHIDS.

**ODONTIODA ORESTES** VAR. **BUTTERFLY** (*O. Coronation* × *Odontoglossum percultum*).—A showy hybrid with a graceful spike of seventeen flowers of medium size, the segments blotched with red-scarlet, the petals having an additional zone of similar colour near the margin; labellum with a whitish apex, and the spiny crest bright yellow. From Mr. J. J. Bolton, Claygate, Surrey. First-class certificate.

**LÆLIO-CATTLEYA ORANGE BLOSSOM** VAR. **MAGNIFICA** (*L.-C. Elinor* × *L.-C. Trimyra*).—One of the most attractive of *Lælio-Cattleyas*, the spike bore five flowers of a uniform apricot-yellow colour, the labellum slightly darker and with an orange-yellow throat. From Lieutenant-Colonel Sir George Holford, K.C.V.O., Westonbirt, Tetbury, Glos. Award of merit.

**CATTLEYA SCHRÖDERÆ** VAR. **HERCULES**.—Although this plant has been cultivated in England for many years, it is not until the present occasion that its flowers have been seen at their best. It belongs to the alba section, the broadly developed segments being entirely without colour, except for the usual light orange-coloured area on the labellum. From Messrs. Stuart Low and Co., Jarvisbrook, Sussex. Award of merit.

# THE MIDLAND DAFFODIL SHOW

THE twenty-fifth show, or, to be more accurate, what ought to have been the twenty-fifth, had we no war, took place on April 22nd and 23rd in its old home, the Botanical Gardens, Edgbaston, Birmingham. No place in the world has quite the same claim to the tender regard of all lovers of the daffodil. It was here that the first daffodil show, I think I may say in the world, was held in the year 1893 at the suggestion and under the guidance of the late William Hillhouse, my old Cambridge coach for the Science Tripos, who with the passing of the years had now become Professor of Botany in Birmingham University and secretary of the Botanical Gardens. These early shows were the eocene times of daffodil shows. To be somewhat Irish, there are still with us living fossils of this distant past. Deepest down in the strata is my good friend Duncan Pearson—Daffodil Pearson his friends call him. Present as an exhibitor at this first show, he has been at Birmingham every year since in that capacity or as a visitor; first in the Hillhouse era, then in the Sydenham era, and lastly in the Smith era.

To mark this occasion the Royal Horticultural Society sent a deputation for the third time in our history to visit the Show. Actions speak louder than words. Their verdict was expressed by their awarding no fewer than three gold medals, one silver-gilt Flora, silver-gilt Banksian, beside others of lesser value. No bad record for any exhibition. This twenty-fifth anniversary was also marked by the giving of the gold medal of the Society to Mr. Herbert Smith. Only once before has this signal honour been bestowed on a member, and that was when the Rev. G. H. Engleheart retired from the office of president. Mr. Smith has been secretary ever since the Society was founded by Robert Sydenham, and the amount of work that he has done for us nobody knows except who, like myself, are familiar with its internal machinery. It was a proud day in my life to preside as

president at the official luncheon to the Royal Horticultural Society's deputation (Messrs. E. A. Bowles, W. R. Dykes and R. Cory) and to make the presentation to Mr. Smith. In my little speech I could not refrain from tilting at the article on white daffodils which had appeared in the *Morning Post* on the day before (April 21st). I can only suppose that the writer must have a grudge against the editor, for the little bit of it that really touched upon white daffodils was as full of errors as an egg is full of meat, and that the editor never read it or was totally ignorant of daffodil history. Mr. Richardson did not raise Beersheba. It was raised by Mr. Engleheart. White daffodils are not a twentieth century novelty, as anyone knows who has ever looked at his Parkinson or who is familiar with the work of William Baylor Hartland of Cork, or is aware that it was the *Narcissus poeticus* that was first called a daffodil.

Were everyone of that writer's opinion, there would be "no use" for daffodil shows—that is to say for man-made flowers. Why, I ask, do people so often "sware by" flowers that are the result of impersonal agents and pooh-pooh those made by living agents? We do not all do this, and so we have our daffodil gatherings such as we have just had at Birmingham.

Beersheba, the fine white trumpet of Engleheart, could be compared on this occasion with old varieties like albicans. I give the unknown writer a present of all the albicans, as I suppose he would give me all the Beershebas—*Chacun à son gout*. Albicans was one of a group got together at considerable trouble by Miss Pope, a daughter of the man who will go down to posterity as the man who set the big price ball rolling when he gave £100 for four bulbs of Will Scarlett. It was composed of the old varieties that were in vogue when the Midland shows started, e.g., Edward Hart Beatrice, William Wilks, Agnes Barr, Grand Duchess and Hodsock's Pride. Few know them now. Yet I can

remember our first shows when we thought as much of some of these as we now do of Royalist, Kantara, Dinkie and Beauty of Radnor. There were some wonderful flowers on view this year. One cannot name them all, or even a tithe of those I would like to do. Some for the very good reason that they are at present only under numbers; others because the space allotted me is not elastic. Still, I will do what I can, and if I seem to ignore the fine groups "not for competition" and the good individual exhibits in the competitive classes, it is not because I could not say much to their credit, but because I have a feeling that readers want to know more about the individuals than the mass.

After our little dinner at the Grand Hotel on the first day of the show, Mr. Herbert Chapman suggested that it would be most interesting for everyone to name what they considered the best flower in the show. We did so, with the result that the giant yellow self incomparabilis Wheel of Fortune came out first, Beersheba and Tenedos (a stellate giant Leedsii) second, with the following as equal third: Mystic, Lily of Rotherside and Resplendent. Wheel of Fortune is featured in one of the pictures that accompany this article. It is a soft yellow self of fine form and symmetrical build, with a slight recurve to the cup. Beersheba is a magnificent white trumpet. Tenedos is a very large giant Leedsii, and I have read that Brodie of Brodie thinks it one of the most remarkable flowers in his unique collection. Mystic is a most dainty small-cupped Leedsii with a conspicuous pink rim to the cup. I do not wonder that Mr. Wilson has been told that it is doubtful if it is not the most beautiful seedling he has raised. Lily of Rotherside is a white Leedsii raised by Mr. Chapman—it is a most refined flower. One must not, however, paint the lily. Resplendent is a striking Barrii or possibly incomparabilis with pure poeticus white perianth and a large red flattish corona irregularly marked with red blotches.



The second of the illustrations is a New Zealander—Silver Plane. It is of a very unusual shape for a Giant Leedsii with its large flat corona, which is of a decided yellow tone. It is one of the best of all New Zealand raised daffodils. This opinion of mine was confirmed by a keen daffodil visitor, Mrs. Trevena from Dunedin. It is recognised in the Dominion as one of poor Mr. Lowe's finest flowers. It was instructive to hear from this lady her opinion of our home flowers compared with those raised there. She said in big yellow incomparabilis and in Giant Leedsii they were quite our

space as in Dr. Lower's group. It fascinated Mrs. Trevena. She always seemed to be in front of it on the second morning. It was good. Here is a rough idea of its coloured contents: Ten all red, bowls of which Merkara was my favourite; two red (?) perianths, John Peel being the best; five wide bold red edges of which Golconda appealed to me very much. No wonder the group was awarded a gold by the R.H.S.

Among other flowers new to me I noted an extremely taking, very loosely built double white in Messrs. Barr and Sons' group. It will have a future, I feel sure,

Will Scarlett, were always catching my eye as I passed them. They are decorative rather than florist in their general appearance.

The half-brothers Tapin (a bicolor trumpet) and Primrose Knight (a deep primrose and soft pale yellow trumpet) were examples of what show trumpets should be, fit in every way to associate with the famous Royalist. (What a collection Beersheba, White Knight, Carmel, Royalist, Primrose Knight and Yukon would make!).

Dactyl, a shapely green-eyed poet, and Dinkie, a greeny yellow Barrii, end my



N. SILVER PLANE, A BEAUTIFUL GIANT LEEDSII.



GIANT YELLOW SELF INCOMPARABILIS, N. WHEEL OF FORTUNE.

equals, but in all else, especially in big red bowls, we outdistanced them. I have never seen so much good colour in such a small

for decorative purposes. It is named Snowsprite. Then John Bushby and Gallipoli, with their drooping flowers reminiscent of

selections. Were I in want of bulbs, I would say "Let them all come"—but what about my pocket?

JOSEPH JACOB.

## NORFOLK AND NORWICH HORTICULTURAL SOCIETY

THE spring show of this Society was held on April 16th at the Drill Hall, Norwich. The weather conditions were not at all favourable, consequently the attendance was not so large as expected.

In the classes for narcissi, Captain J. H. Mander took the leading position, staging many of his own raised seedlings under numbers and they comprised almost every type. Many of these numbered seedlings possessed qualities that bid well for further development, this remark especially applying to the trumpet and Barrii sections. Captain Sandys Winsch staged some very good blooms of the leading named varieties.

The best collection of flowering shrubs came from Mr. J. A. Christie, M.P., Framingham Manor.

Carnations were not so strong a feature as one might have expected, the best lot being staged by the Misses McLintock. Polyanthus, violets and wallflowers added to the charm of the spring flowers.

Pot plants were a good feature. A group set up by the Norwich Corporation Parks Department was a striking feature of dainty, effective arrangement. Mrs. H. J. Copeman, Westwood House, Norwich, staged splendid examples of cinerarias, both stellata and ordinary, herbaceous calceolarias, azaleas and primulas and she was also first in the fern class for a fine plant of *Asplenium australasicum*. Mr. J. E. Moxey exhibited a wonderful plant of *Azalea fragrantissima*. The classes for lily of the valley, mignonette, schizanthus, primulas, etc., brought

exhibits that added their quota to the beauty of the show.

Fruit and vegetables were not so numerous as one could have wished to see. Special mention is due to the collection of vegetables staged by Mr. Gordon Lang, Plumstead; it contained fine examples of forced beans, peas and asparagus.

The trade growers did much to enhance the beauty of the show. Messrs. Daniels Bros., Limited, Norwich, had a wonderful array of forced shrubs, besides a fine collection of the best narcissi. They also made a feature of polyanthus and anemones.

Messrs. A. J. and C. Allen, Norwich, had a fine group of roses in pots of several types, the dainty polyantha section being very prominent.

AYTCH PEA.



# The J.P. SUPER

*Costs more but easily  
the cheapest in the  
"long run."*

Although higher in price the  
"J.P." simply bristles with  
features not possessed by any  
other make.

**FREE.** Send for copy of descriptive  
Booklet 'Z' or ask your Iron-  
monger or Seedsman for a demonstration—  
it will be a revelation.

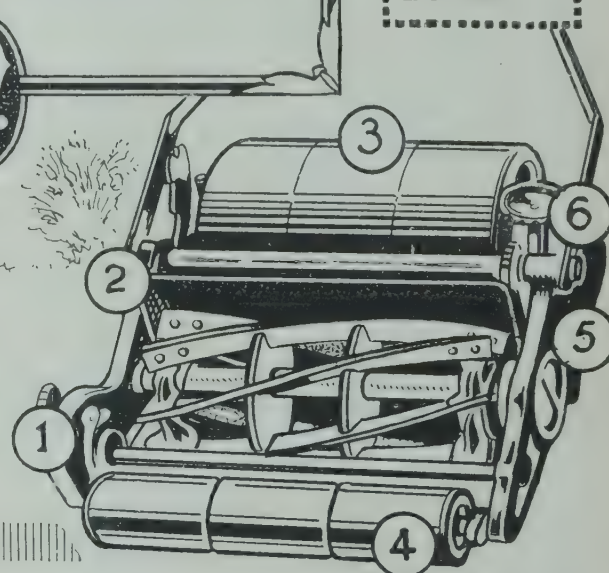
J. P. SUPER LAWN MOWERS LTD., Meynell Road, LEICESTER.

## Note its Efficiency Features:

- 1.—Handwheel to regulate cutting from medium to close.
- 2.—Rotary cutter easily removable from machine without dismantling bearings.
- 3.—Three-part roller, speed-up gears in oil chamber inside cylinder.
- 4.—Lignum Vitæ rollers.
- 5.—Roller chain and sprocket wheels running in oil bath.
- 6.—Handwheel adjusts setting of cutter.

## A USER WRITES:

"I estimate your mower will save the time and labour of one man at 1/- per hour... At the end of the season the machine will have cost me nothing." — EGHAM.



## FERTILISERS.

LAWNS, 20/-; FRUIT TREES, VINES, 19/6;  
GENERAL GARDEN USE, 17/-;  
WORM KILLER, newly introduced. 19/-  
Per cwt., carriage paid. Also all other fertilisers.

**H. RICHARDSON & CO.,**  
Keldergate Bridge Works, YORK

## EUREKA WEED KILLER

LABOUR SAVERS. "EUREKA" LAWN SAND, SOIL FUME, NICOTINE, INSECTICIDES, FUMERS, SPRAYS, AND OTHER CHEMICALS AND SUNDRIES. SEE LIST. PLEASE ASK YOUR AGENT FOR THE EUREKA ARTICLES—THEY ARE ALWAYS SATISFACTORY. IF ANY DIFFICULTY IN OBTAINING, WE SEND DIRECT, CARRIAGE PAID.

Only Address: TOMLINSON & HAYWARD LTD. LINCOLN.

## SOIL PESTS DESTROYED

by "ALPHOL"

Sample 14 lb., 3/6 carr. paid

Write for particulars of this and other reliable Garden  
Helps, Lawn Improvers, "Veribest" Seeds, etc., to

Garden Supplies, Ltd., Granmer St., Liverpool

MATTHEWS'  
HIGH GRADE  
HORTICULTURAL  
FERTILISER

COMPARE  
ANALYSIS

## MATTHEWS' BIG PRODUCTION FERTILISERS

THOUSANDS OF TONS SOLD ANNUALLY

Ammon. Phos. Potash

lbs. cwt.

PROFITABLE  
GROWING

IN  
1925

EXHIBITION & PROFIT

MATTHEWS'  
"Maximum Crop"  
GARDEN  
SEEDS

SCOTCH SEED  
POTATOES

Choice Flower Seeds  
Finest Spring Bulbs

Write for Catalogue  
IT WILL PAY  
YOU

MATTHEWS'  
For POTATOES & GENERAL  
GARDEN use.  
All are "MAXIMUM CROP"  
COMPLETE MANURES essential  
FOR ECONOMICAL SUCCESS.

NOTE—double value compared with some that are sold.

Bone Charcoal ...	15%	67%	—
Bone Meal, English, Best ...	45%	45%	—
Basic Slag ...	1%	30%	—
Bone Flour, Steamed ...	10%	60%	—
Fish Manure ...	—	14%	—
Garden Salt ...	16%	—	—
Hoof and Horn ...	—	—	14%
Kainit ...	—	—	—
Lime, Ground Carbonate, Superfine ...	8.5%	18%	—
Meat and Bone Meal ...	8%	30%	—
Meat Meal ...	18%	—	—
Nitrate of Soda ...	14½%	22%	2½%
Peruvian Guano ...	25.75%	—	50%
Sulphate of Ammonia. 21% Nitrogen ...	—	—	—
Sulphate of Potash ...	—	35%	—
Superphosphate ...	—	—	—

CARRIAGE PAID on orders to the value of 5/- upwards to the nearest station in the United Kingdom  
ESSEX RESIDENTS 1/6 per cwt. less.

**JAMES & GEO. H. MATTHEWS,** Head **HAROLD WOOD, ESSEX**  
Offices: Phone: ROMFORD 284  
And at COLCHESTER, ONGAR, BRENTWOOD, CHADWELL HEATH, WICKHAM BISHOPS and BRIGHTLINGSEA

MATTHEWS'  
HIGH GRADE  
TOMATO  
FERTILISER

COMPARE  
ANALYSIS

MORE PROFIT  
THROUGH  
EXTRA YIELD  
AND  
IMPROVED  
QUALITY.

MATTHEWS'  
LAWN SAND

Effectively kills all the com-  
mon weeds in lawns, and at  
the same time acts as an  
excellent Fertiliser. Sprinkle  
evenly over the weedy  
patches, at the rate of 3-ozs.  
per square yard, in dry  
weather. Repeat at inter-  
vals of a few weeks, till the  
weeds are killed. The grass  
will become brown and  
appear to be burnt, but it  
will recover, and the useful  
grasses will grow more  
vigorously.

4/- 14 lbs. 6 6 28 lbs.  
10 9 56 lbs.  
20/- cwt.



## CARNATIONS for Garden & Greenhouse



### PERPETUAL FLOWERING (Greenhouse) Varieties

We carry large stocks—rigidly selected—of all the best varieties. For immediate flower we offer fine plants in 6" pots in bud. Young stock, ex 3½" pots, stopped and broken, to pot along, or plant, ready now.

All Collections are carr. and packing paid for cash

6 plants in variety	6" pots	ex 3½" pots
12	24/-	8/6
25	45/-	16/-
25	80/-	30/-

### ALLWOODII (Half Pink, half Carnation)

New and delightful self colours have been introduced in the ever popular Allwoodii—the hardy plant which grows and flowers in every garden and window-box. The collections quoted below are exceptional value, and include many quite new and unique varieties.

6 plants in variety, 6/6 12 plants in variety, 12/- 25 plants in variety, 22/6

### HARDY PERPETUAL BORDER CARNATIONS

Will eventually supersede the old Border type, being hardier, freer flowering, carrying bolder and more sweetly perfumed flowers. A much wider range of colour is now obtainable, and the following collections are first-class value, embracing many of the later kinds.

All plants ex 3½" pots—immediate delivery.

6 plants in variety, 15/- 12 plants in variety, 27/6

CATALOGUE of all CARNATIONS POST FREE ON REQUEST but order the above collections at once for prompt delivery, and exceptional value.

*Allwood Bros*

The leading  
Carnation Raisers  
and Specialists  
in the World.

Dept. 4, Haywards Heath, Sussex.

Please mention THE GARDEN when writing

## 500 FEET WATERPROOF GARDEN WIRE

for 6/-. carriage paid!!! Larger lots much cheaper. Ideal for peas, fruit, tying, greenhouses, barricading, and dozens other uses. Samples free. Catalogue 300 bargains. GOVERNMENT STORES, 162, Albert Street, Lytham.

## BENTLEY'S SPECIALITIES

### Weed Destroyers

(Liquid 1 to 80)

(Powder 1 to 25)

### Daisy Killer (Lawn Sand)

### Earthworm Destroyers

(Liquid and Powder)

### Fertilisers

For Lawns, Fruits, Flowers and Vegetable

### Insecticides

For all kinds of Pests and Filth

### Fungicides

For Fungoid Growths indoors and outdoor

### Fumigants

For use under glass and in the soil.

### Garden Requisites

Of all descriptions

Complete illustrated Catalogue free on application

— MANUFACTURERS: —

**JOSEPH BENTLEY**  
Chemical Works LTD.  
Barrow-on-Humber, HULL

Please mention THE GARDEN when writing.

*Kill those Garden Pests*

WITH  
↓  
**"KATAKILLA"**

POWDER INSECTICIDE WASH  
NON-POISONOUS

READY FOR MIXING WITH WATER

2½ CARTONS TO MAKE 10 GALLS WASH  
6" " " " 50 " " "

STOCKED EVERYWHERE

**MCDUGALL & ROBERTSON LTD**  
BERKHAMSTED, HERTS.

**CERTAIN DEATH**  
TO  
GREEN-FLY  
CATERPILLARS  
AND ALL OTHER  
INSECT PESTS

## WEEDS

One application of

### HARRISON'S Reliable WEED KILLER

will keep your Garden Paths, Carriage Drives, etc., free from weeds for at least 12 months. The best Killer for Daisy, Plantain and Dandelion in Lawns. Brightens the Gravel. Immense Saving in Labour.

5 Gallons .. 23/6 Drum .. 12/- extra, Carr. Paid  
10 " .. 42/6 " .. 15/- " " "  
40 " .. 150/- Cask .. 80/- " " "

Irish orders are not subject to these carriage terms but are paid to any English port. Full price allowed for all drums and casks if returned in good condition carriage paid within 2 months.

N.B.—In the prices of the above please note that this Weed Killer mixes 1 to 50 of water, being double the ordinary strength. One gallon mixed with 50 gallons of water will cover an area of from 150 to 200 square yards effectively.

**G. HARRISON,**  
Horticultural Chemist,  
READING.

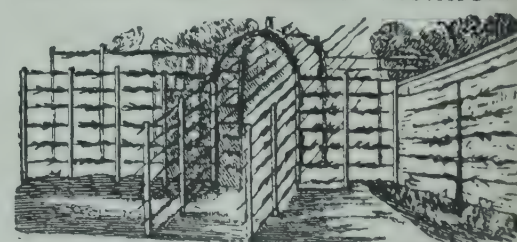


Please mention THE GARDEN when writing.

## HILL & SMITH, Ltd., BRIERLEY HILL, STAFFS,

Makers of

IRON FENCING, HURDLES, GATES, WIRE  
NETTING AND GARDEN IRONWORK



Other Products—Hay and Grain Sheds, Dutch  
Barns, Galvanized Corrugated Sheets and  
Structural Steelwork.

Catalogues free on mentioning this paper.

London: 8, VICTORIA ST., WESTMINSTER, S.W.1

Please mention THE GARDEN when writing.



# SIMPLE GARDENING

## STRAWBERRIES.

WHERE littery manure is available in quantity it is used liberally in the late autumn to surface-mulch the strawberry beds. It keeps the roots warm, preventing frost reaching them in a severe degree, and, when the thaw comes, acts as a shield to the sun's rays while the soil is in a frozen state. At the present time this littery manure will have lessened in bulk considerably, only the freshest portion of the straw remaining. This will be quite clean, washed by the winter's rains, and should not be disturbed, as it will prevent the ripening fruits getting soiled later on. But it is a wise plan to examine carefully the crowns of all plants now and remove any soil, leaves or other foreign matter found lodging on them, scratched there, possibly, by birds. This is also a good time to put on the final layer of straw, hay or quite littery manure as a protection to the fruits in due course. The litter will get well beaten down before the fruit ripens. Strong plants, put out a year ago last July and August, yield the finest fruits, and if a few are required for exhibition they will be larger if any small side crowns are now removed. Remove also the smallest berries on the central stem while they are quite small. All necessary supports for the nets should be placed in position now. Fine wire netting round the sides saves the string nets from rotting on the ground.

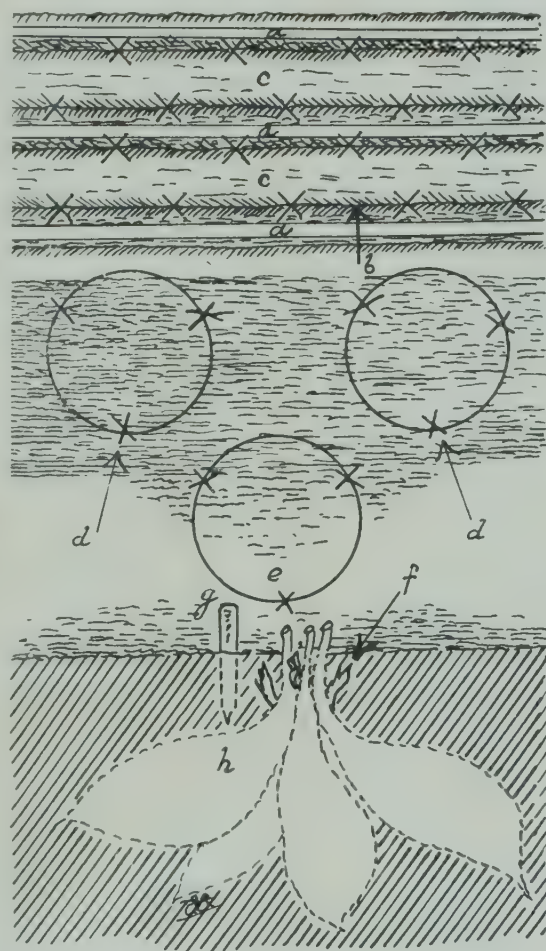
## WATER LILIES IN TANKS AND TUBS.

Water lilies are liked by everybody—by those who possess means for growing them on a large scale in very natural surroundings, and by those who possess a small formal garden in town or suburb. Perhaps the majority of the latter are the most enthusiastic. Of course, where convenient, a tiny tank-pond can be cunningly arranged so that it will appear to be quite natural. Whether tank or tub be used, it should be sunk into the ground to half or two-thirds its depth. It looks much better about 1ft. above the ground than placed on the ground level. Half-sized casks, or full-sized casks cut to form two tubs, are the best. The insides should be charred: this is done by placing shavings or paper, saturated with paraffin, in the vessel, lighting and allowing the material to burn till the sides are nicely charred, then suddenly turning over the tub to put out the flames. Tubs so treated will last many years. The position should be one open to the sun; and the water supply, too, must be considered. A tiny trickle in and overflow will be sufficient; failing this, fresh water must be placed in at least twice a week—not necessarily all fresh. Turves, in which the grass has died, should be placed in the bottom, and the plants secured there by placing bricks to prevent the roots being disturbed. The tanks should be cement or stone ones, not iron. Some good varieties of water lilies which are easy to grow are *Nymphaea alba*,

white; *NN. odorata Luciana*, blush pink; *Laydekeri purpurea*, deep rosy crimson; and *Nuphar luteum*, yellow English water lily. These are very reasonable in price.

## PLANTING OLD DAHLIA TUBERS.

Perhaps four cultivators plant old tubers to one who plants newly rooted cuttings; but, whether young or old roots are planted, it is advisable to prepare and treat the ground in the same way. Old tubers may be planted early in May, but young plants must not be planted before danger of frost is past—in June. The soil should not be trodden upon after the dahlias are planted. If planted in rows, the following rules should be observed: In the sketch, *a, a, a* show the narrow paths between



beds *b* and *c, c*; two rows in each bed, each row of plants can be attended to without treading on the bed itself. If the young shoots come through the soil early, some of the latter should be drawn up to form a ridge as shown at *b*. Group planting is shown at *d, d, e*; the crosses represent plants. The lower sketch shows how deep to plant: *f*, young shoots growing through the soil. Labels should be placed clear of the plants, shown at *g*, and not driven into the tubers, *h*. Supporting stakes, too, should be driven into the ground about 16ins. from the old tubers.

## HERBS.

With a few exceptions, herbs are not grown as carefully now in private gardens as they were a generation or two ago. The herb garden used to be a feature, and the variety lent additional interest. In large gardens more herbs may be

grown than in small ones, but in the latter the following should have place and be well grown: parsley, mint, thyme (common), sage, rue, pot marjoram, fennel, horehound and hyssop. With the exception of mint, all the above may be grown luxuriantly from seeds. Mint should be grown in a naturally moist soil and from roots, not seeds; the roots are similar to those of the couch grass and grow almost as freely in a suitable medium. It is only necessary to lay the roots flat in shallow drills and cover them with 2ins. of soil. Parsley, too, should be grown in a moist soil if it fails in light, and *vice versa*. This plant does fail to thrive in some soil, and it is always wise to grow it in several parts of the same garden. The majority of the herbs like a medium light soil and a sunny position. I may say, here, that herbs should be gathered for storing when in flower, as they are then at full strength. A medium rich soil is best, and the plants should be grown in it in beds or rows. Keep the soil free from weeds, and the herb garden will look all the more inviting. Old clumps of thyme are readily made to yield hundreds of young rooted plants by layering, placing soil in the centre of each clump. Sage seeds attract mice as aniseed does dogs.

## PEACH TREES UNDER GLASS

When one enters a peach house one wishes to know what to do to the trees in order that one may reap a full crop of highly coloured fruits. Peach trees may be very successfully grown under glass without any fire heat. Unless forcing is the object in view, I prefer to grow the fruits without fire heat. Young shoots are now growing freely, and it is of the highest importance that they should not be overcrowded. The young shoot of this season becomes the fruit-bearing branch of next year. These young shoots should not be closer together than 4ins.; 6ins. would be better. The fruits, on healthy trees, should be evenly thinned out so that there is one to each square foot, approximately. The fruits retained should be on the top side of the branch, and then it will get the maximum amount of sun, be highly coloured and of richer flavour. Clean trees are essential. Daily syringings do good, judicious watering and feeding too. Ventilation should be well attended to, then we secure those big, thick, dark green leaves so much prized. A small sprinkling of soot on the border once a week will assist in keeping down red spider, the ammonia arising from it being bad for the spider and good for the foliage. Aphides should be kept in check, too, by fumigating regularly once a fortnight. It is most important that every care and precaution should be taken during the next few months so that a good crop of fruit is obtained. Bad methods of cultivation and lack of attention to the crop when pests make their appearance are generally responsible for poor crops.

GEORGE GARNER.



# CORRESPONDENCE

## NOTES ON VIBURNUMS.

SIR,—I was much interested in the "Notes on Some Viburnums" in the issue of THE GARDEN of April 18th. It may be of interest to your readers to know that Viburnum fragrans fruited in my garden last year for the first time. This was one of the original plants raised by me from Farrer's seed. "E. H. M. C." omitted Viburnum bithuense, which is in my opinion by far the best of all the viburnums. It is much after the style of V. Carlesii, but has much bigger flowers and grows into a larger bush. The flowers are white, but one of its attractions is that the buds are bright pink before they open.—F. C. STERN.

## BLACK CURRANTS.

SIR,—I desire to thank "A. H." for calling attention to the Baldwin variety of black currant on page 222 of THE GARDEN. My experience coincides with his in certain respects and explains the reason why I did not recommend it. Late frosts mar the prospects of success in many seasons by destroying the essential organs of the flowers. Baldwin is the earliest black currant to bloom. If the contour of the plantation gives natural protection, much loss will be prevented. Every garden is not favourably placed in this respect, however, and the application of artificial protection would not be an economic proposition, I fear. I thoroughly agree with "A. H." that there are few fixed strains of Baldwin, and I congratulate him upon having worked up a reliable stock for which there is such a vigorous demand. It would be interesting to know if Baldwin is more liable to variation than other varieties. I know of none which gives such a large percentage of outsiders. One can scarcely think that the ordinary channels of commerce will ever absorb large quantities of Baldwin on account of the reddish colour of the berries when ripe. Colour does not count for much in the manufacture of preserve, but it does in shop and market trade. The public demand a black currant which is really black.—Geo. H. COPLFY.

## RIBES LAURIFOLIUM.

SIR,—The flowering of Ribes laurifolium in the Royal Botanic Garden, Edinburgh, prompts the writing of this note. Although it cannot be reckoned a decorative plant, so far as its flowers are concerned, it is well worthy of cultivation, partly on account of the earliness of its flowering and partly for its foliage.

It received an award of merit from the Royal Horticultural Society, when the Hon. Vicary Gibbs exhibited it on February 20th, 1912. It had been raised at Aldenham, from seed sent home by E. H. Wilson, who collected it in western Szechuan, where the plant occurred among rocks at an altitude of 5,000ft. It is, in habit of growth, by nature dwarf and spreading, and is said to attain a height of about 6ft., so that it should be an excellent subject for the higher parts of the rock garden. The leaves are ovate-lanceolate, evergreen, and rather thick. They are of a fine dark green colour, and when full grown tinged with a pleasing purple shade at the margins, which are toothed.

The flowers are yellowish green in colour and carried in axillary racemes, which make their appearance in February or March. They possess rather large pale green bracts, which are quite distinctive.

The plant may be reckoned as hardy, although it appreciates a little shelter. It is recorded (Journal R.H.S., XXXVIII, page liv.) that plants growing at Aldenham

in an exposed position suffered no damage, although on two occasions during the previous winter between 20° and 30° of frost were registered. It is planted in a sheltered part of the rock garden at Edinburgh, where it appears to do quite well.

There are good illustrations of the plant in the *Botanical Magazine*, t. 8543, and the *Gardeners' Chronicle*, III, 55, page 239.—R. H. JEFFERS.

## NATIVE PLANTS.

SIR,—I was much interested in your leader on the above subject (page 167), and quite agree that many of the British alpine plants are difficult to cultivate. Gathering only a few specimens, or perhaps only one of a rare plant, I had little opportunity for making many experiments. There is more in it than the question of food, seeing that the plants were mostly grown in pots, and in all cases first established in pots. The saxifrages were as puzzling as any. From spring till the plants were put in a cold frame Saxifraga cernua, S. hypnoides, S. nivalis, S. aizoides and S. oppositifolia thrived well; but after being put in the frame with top ventilation they began to damp off wholesale. S. cernua, found on one very restricted area of a mountain top, when kept in a cold frame during summer, developed a rosette of leaves from each bulbil, and by autumn had no reserves with which to continue growth the following year and promptly died. Other bulbils grown in a pot, fully exposed on the balustrade at the top of a three-storey house all winter, flowered beautifully the following summer. Climate and full exposure seemed to play its part here. Salix lanata in a pot in a cold frame got on well till the summer got really warm, when it died suddenly. The other species succeeded well in the open for a time, and S. Andersoniana and S. phlycifolia produced hybrids which sowed themselves spontaneously and flowered in two or three years' time. S. Myrsinites, S. Lapponum, S. reticulata, S. herbacea and a hybrid between the latter and S. Arbuscula all flowered. The first named made

two or three distinct growths a year, but after a mild winter it came into growth in March and got all its leaves destroyed by a late frost, from which it never completely recovered. Tofieldia palustris thrived well till one year when I re-potted it in rather heavy loam, when it gradually died. Draba rupestris in pots or pans made a showy plant, but in the open became seedy, weedy and sowed itself, but was uninteresting, owing to few flowers scattered on long stems.—J. F.

## GORSE.

SIR,—The discussion of this subject by Dr. R. Lloyd Praeger (page 172) was very full and highly interesting, and if permitted I would like to add a few observations which I have made. The vindictive thorniness of the common gorse is an effective protection against all domesticated or farm animals, but in some rabbit warrens, where other vegetation is scarce, the gorse often fares badly, especially after it gets burnt by accident or otherwise cut down, for the rabbits then keep it very closely eaten down. I have seen one of the gorse mills mentioned by Dr. Praeger in a hilly part of Scotland. It consisted of a stone very like an upper millstone, with a hole in the centre. Attached to a long shaft, a horse travelled round a circular course in which the gorse was laid, so that the big stone crushed it, as the stone followed the horse at the other end of the shaft. It is indeed difficult to make gorse happy in a garden, because it loves the wind on the open sandy heath; but the double gorse grows compactly and flowers profusely on a sandy mound in Kew Gardens. Seedlings of the common gorse behave erratically in producing simple or compound leaves, as stated, but a good proportion of them have simple leaves, narrower than the seed leaves, and gradually becoming smaller till reduced to spine-like organs on stems only 2ins. to 3ins. high. The broom produces compound leaves from the first, rarely producing a large, simple leaf. I can see only one on fifteen seedlings.—HORTUS.

He can only tackle them one at a time  
but—



# VERMOL

## KILLS WORMS AND GROWS GOOD GRASS

What users say of Vermol:—

The WETHERBY GOLF CLUB.

"We should like to express the entire satisfaction of the Committee at the results which have been obtained by the use of your Worm Killer.  
"All our members have remarked during the past summer on the wonderful improvement to our greens derived almost entirely from the use of VERMOL WORM DESTROYER."

Vermol Lawn Sand  
(Weed Killer)  
Vermol Grass Manure  
(for impoverished turf)  
Vermol Insecticide  
(for Leather-jackets  
and other soil pests)  
Vermol Grass Seeds  
(Finest Mixtures for all  
purposes)  
Above specialities also  
highly recommended.

## VERMOL PRODUCTS CO.,

61, St. Mary Axe, London, E.C.3

Telephones: Avenue 1869 & 1870.

Telegrams: "Pinerous, Phone, London."







1925

CATALOGUE of  
Perpetual-Flowering**CARNATIONS**If you are interested and would like a  
copy, post your name and full address to:**C. ENGELMANN, Ltd.,**  
SAFFRON WALDEN, Essex

Try our "**Marvel**" Collection of dependable  
seeds for a 300 yards' plot, carriage paid for 5/-  
Potatoes excluded! Catalogue included!  
**SPSTONES, Seed Experts, ROTHERHAM**

**GLADIOLUS****FIRST-SIZE BULBS.**  
**FINEST VARIETIES.**

	per doz.	100
America, lilac rose .. ..	1/6	10/0
Baron Hulot, indigo blue ..	1/9	12/6
Brooklyn of Holland, pure white	1/9	12/6
Golden West, orange-scarlet ..	1/9	12/6
Malley, delicate salmon-pink ..	1/6	10/6
Love's Fire, coral scarlet ..	2/6	17/6
Novelness, creamy white ..	2/3	15/0
Tagara, nankeen-yellow ..	1/9	12/6
Tanama, deep pink ..	1/9	12/6
Schwaben, soft yellow ..	1/9	12/6
War, deep blood red ..	1/9	12/6
White Giant, pure white ..	1/9	12/6
COLLECTION 100 in 10 varieties ..		13/6
" 120 " 12 " ..		16/6
" 240 " 12 " ..		30/0
Primulinus Hybrids ..	1/5	10/6

All Bulbs Carriage Paid. Catalogue Free.

**WM. POWER & CO.,**  
**WATERFORD.**

Please mention THE GARDEN when writing

# REAMSBOTTOM & CO'S

## GAY GARDEN

### GOLD MEDAL

# ST. BRIGID ANEMONES

NONE GENUINE WITHOUT OUR GOLD MEDAL SEAL

Wonderfully improved in Form and Colours.

**FEW FLORAL SIGHTS CAN  
COMPARE WITH A GOOD  
BED OF THEM.**

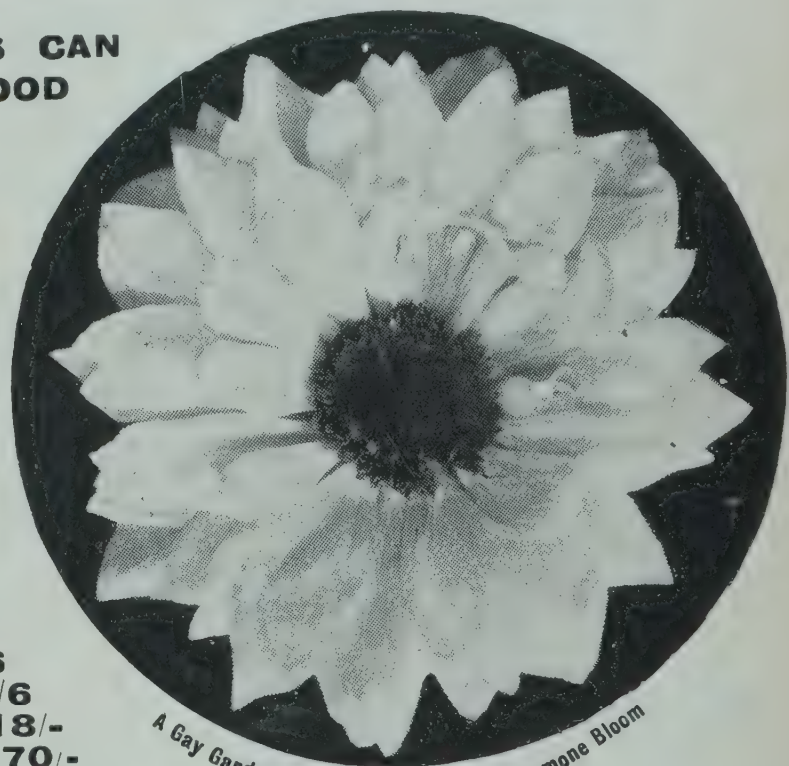
**PLANT NOW.**

**REAMSBOTTOM & CO.'s**  
**LATEST IMPROVED**  
**"GAY GARDEN"**  
**GOLD MEDAL ST.**  
**BRIGID ANEMONES**

are the finest in the world.  
NONE ARE GENUINE WITH-  
OUT OUR GOLD MEDAL SEAL

12	..	..	..	3/-
24	..	..	..	5/6
50	..	..	..	9/6
100	..	..	..	18/-
1,000	..	..	..	170/-

Full Cultural Directions sent that  
will ensure success to every Amateur



A Gay Garden Gold Medal St. Brigid Anemone Bloom

**ALSO PLANT NOW**

**LUPINUS ROSEUS** (Pink Lupins). Our glorious strain  
of these hardy perennial Lupins, most lovely shades of  
pink. 2, 1/3; 6, 3/-.

**DELIGHTFUL, FRAGRANT, SPRING-FLOWERING**  
**AURICULAS**. Lovely rich velvety colours, vastly  
superior to those usually seen. If you do not appreciate  
Auriculas, try ours, and you will be delighted. 6, 2/6; 12,  
4/9.

**CARNATION, EARLY FLOWERING FRENCH**. Single  
and giant double flowers of exquisite mixed colours, very  
fragrant, 6, 2/-; 12, 3/6.

**ASTER KING GEORGE (NEW)**. Extra large-flowering  
Michaelmas Daisy; huge bluish-violet blooms, 1/6.

**MYOSOTIS ROYAL BLUE**. Dark intense electric  
blue; strong grower. 15, 1/6; 100, 7/6.

**MYOSOTIS VICTORIA**. (Hen and Chickens Forget-  
me-not). Sweetest little blue. 12, 1/6; 24, 2/9; 100,  
8/6.

**LOBELIA CARDINALIS, QUEEN VICTORIA** (The  
Cardinal Flower). A most exquisite dazzling flower, 3ft. to  
4ft. high, vivid flowers and foliage. 3, 1/4; 6, 2/6; 12,  
4/6.

**LUPINUS POLYPHYLLUS**. Purple and white, 4, 1/3;  
12, 3/-.

**FRAGRANT TREE LUPIN**. White. 2, 1/4; 6, 3/6.

**PHLOX EVELYN (NEW)**. Large flowers and immense  
size, richest salmon-rose shade, an exquisite novelty, 1/6.

**PHLOX FIREGLOW (NEW)**, huge trusses of brilliant  
orange-scarlet, with dark centre, 1/6.

For other varieties, also Roses, Fruit Trees, etc., please see our ILLUSTRATED CATALOGUE FREE.  
All Cash orders of 15/- value and over carriage paid or post free, packed by experienced hands. For Free Delivery,  
smaller orders, 5/-, 10/-, add respectively for Carriage or Postage, etc., 1/- and 1/9. Safe Arrival and Satisfaction  
Guaranteed.

**REAMSBOTTOM & CO.**

Tower Nurseries, West Drayton, Middlesex (Also at Geashill, Ireland)

Please address to Tower Nurseries, WEST DRAYTON, and mention  
THE GARDEN when writing.

**PAPAYER KING GEORGE** (striking novelty), bright  
scarlet, with fimbriated petals. 1/3 each.

**PAPAYER MAHONY**. Chocolate colour, rare. 1/6.

**GAILLARDIA GRANDIFLORA**. Our splendid improved  
extra large-flowered; choicest rich yellow, with crimson  
or brown markings. 4, 1/4; 12, 3/6.

**GENTIANA ACAULIS**. The glorious Blue Gentian,  
prized wherever a hardy flower is grown. Very dwarf.  
Likes a loamy soil, with broken stones mixed through  
it. Extremely hardy. 3, 2/3; 12, 7/6.

**PINKS, EXCELSIOR**, blush with scarlet centre. A strong  
favourite, 6, 2/6; 12, 4/6.

**PRIMULA OBCONICA GRANDIFLORA HYBRIDS**.  
Very beautiful Primulas; most valuable window or garden  
plants; never seen to be out of bloom, 3, 1/6; 6, 2/9;  
12, 5/-.

**SWEET WILLIAMS**. Wonderful Giant Mixture. Our  
strain is a wonderful variety of colours, and customers  
are always delighted with the very large flowers. Giant  
mixture. 15, 1/9; 50, 5/-; 100, 9/6.

**EDELWEISS**. This very hardy, much-sought-after alpine  
plant has pretty silvery foliage, with star-shaped, silvery  
flowers. 2, 1/3.

**MIMULUS OR MONKEY FLOWER**. Superb giant-  
flowered strain, hardy free blooming plant, covered for  
months with blotched and spotted flowers, 6, 1/6; 12, 2/9;  
24, 5/-.

**BERGAMOT (MONARDA DIDYMA)**. The deliciously  
scented true fragrant Bergamot, with striking scarlet  
flowers, 2, 1/4.

**FREE MONEY SAVING BONUS**  
CUPON. — 20 Per cent.  
worth of Additional Plants FREE and  
delivered carr. paid on orders over  
15/- value if you enclose this  
coupon. Quality  
superb. —  
T. G.



## MCDUGALL'S PERFECT SAFETY WEEDKILLER (NON-ARSENICAL)

This Weedkiller is recommended to those who desire a preparation which can be used without the slightest danger of poisoning Human Beings, Domestic Animals, Poultry, Game, etc.

Pint tins 1/6 1 gal. tins 6/6  
Quart " 2/6 5 " " 25/-  
1/2 gal. " 4/- 40 " casks £7/10

Use 1 pint of Weedkiller  
to 3 gallons water.

Sold by Seedsmen, Nurserymen,  
Ironmongers, etc.

If you cannot procure it locally,  
apply direct to

**MCDUGALL & ROBERTSON, Ltd.,**  
**BERKHAMSTED, Herts.**  
(Formerly of Manchester.)



*Perfect  
Safety*

Please mention THE GARDEN when writing.

## HARDY ORCHIDS For Present Planting. Strong Plants.

Cypripedium acaule, 3/6 ea. Cypripedium calceolus, 2/6 ea.  
Cypripedium spectabile, 3/6 & 5/- ea.  
Orchis foliosa (in pots), 2/6 ea. 24/- per doz.

**T. SMITH, Daisy Hill Nursery, Newry, Co. Down**

## The Silver Medal Horse Shoe Boiler

### MAKE THE MOST OF YOUR GREENHOUSE

and install a "Horse Shoe" Boiler complete with pipes. Always a steady heat to ensure a succession of thriving plants, and—most important—Time in attention and Fuel consumption reduced to a minimum.

28,000 SOLD.

Used in the R.H.S. and  
Fotacic Gardens and by  
thousands of satisfied  
Amateurs.

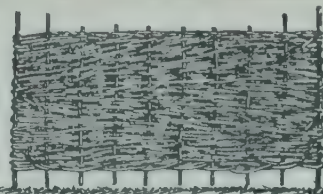
COMPLETE APPARATUS  
— FROM STOCK —

New Booklet "E" and  
reduced prices, post free.

**Chas. P. Kinnell & Co. Ltd.**  
Southwark St  
LONDON, S.E.1. Phone  
HOP 362  
(3 LINES)



Please mention THE GARDEN when writing.



## WATTLE HURDLES

6 feet long

24, 30, 36, 42, 48, 54, 60, 72 inches high

PLEASE STATE QUANTITY

**ERNEST R. SMITH & CO., Haslemere, Surrey**

## "ACME" WEED KILLER AND LAWN SAND

Weed Killer.—Tin to make 25gals., 3/-; for 50gals., 6/-;  
Postage 9d. on each; for 150gals., 15/- carriage paid.

Lawn Sand for destroying weeds and moss.—28lbs., 7/-;  
56lbs., 13/-; carriage paid on 1cwt., 25/- Fertilizes the  
grass.

**Acme Chemical Co., Ltd., Tonbridge, Kent**

### New Dwarf Single Bedding Dahlia "COLTNESS GEM"

(Brilliant Scarlet.)

The original Stock introduced by me in 1918.  
Height 18 inches; no stakes required. Makes  
a striking bed and flowers all season until cut  
down by frost. The ideal plant for public parks  
and open spaces, also for large and small gardens.

Award of Merit, R.H.S. Dahlia Trials, 1923.

Price 10/- per dozen, post free. May Delivery

### Dwarf Bedding Dahlia, Dunecht Yellow

(NEW), Seedling from "COLTNESS GEM,"  
same height and habit.

Price 12/- per dozen, packed and post free.

**D. G. PURDIE, 6J, Waterloo St., Glasgow**

LABOUR SCARCE! Why worry?

## Storrie's Tiny Seedlings

Save time and attention in Seed Rearing.

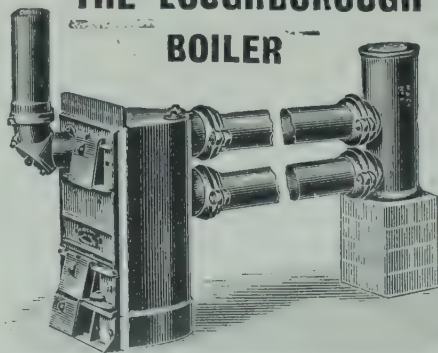
**MILLIONS—YES, MILLIONS! Ready NOW.**

Auricula, Cowslip, Polyanthus, Bedding Plants,  
Annuals and Perennials, also many Floral Gems  
for the Greenhouse.

WRITE FOR UNIQUE CATALOGUE.

**STORRIE & STORRIE,**  
The Specialists, Glencarse, Perthshire.

### THE LOUGHBOROUGH BOILER



The high reputation of this Boiler for efficiency  
and economy is still unrivalled

Easy to fix, easy to manage, and most  
economical in fuel, it is the ideal  
Boiler for the Amateur's Greenhouse

Price Lists and Estimates for complete  
apparatus on application

**MESSINGER & CO., LTD.** LOUGHBOROUGH  
LEICESTERSHIRE  
LONDON OFFICE: 122, VICTORIA ST., S.W.1



## Don't Waste Your GARDEN RUBBISH!

**THE ADCO PROCESS**  
(Patented in the United Kingdom and Abroad)  
WILL TURN IT INTO

## SYNTHETIC FARMYARD MANURE

ADCO is your garden's "Crop Insurance Policy." It  
maintains soil fertility at a "low premium" by  
guaranteeing a supply of organic fertiliser.

As refuse accumulates treat it with

### ADCO ACCELERATOR

if at least half consists of soft green materials such as  
lawn cuttings, cabbage leaves or green weeds; but  
when dead leaves, vegetable stalks, herbaceous border  
cuttings, prunings, straw and straw packing, form the  
bulk of the heap, use **Standard ADCO**.

If your dealer does not stock ADCO write direct to  
us, mentioning his name and nearest Goods Station.

1 cwt. of ADCO makes from two to three tons of  
manure according to the class of rubbish treated.

ADCO Accelerator .. 28 lb. 4/6, 56 lb. 8/-, 1 cwt. 15/-  
Standard ADCO .. 28 lb. 6/-, 56 lb. 11/6, 1 cwt. 20/-

Carriage paid to nearest station. Cash with order.

**ADCO, Ltd.**



**40, HARPENDEN.**

### The Glen Road Iris Gardens

SPECIALIZE IN RARE AND FINE  
VARIETIES OF BEARDED IRISES

Send for List

**Grace Sturtevant, Prop.**

Wellesley Farms . Massachusetts . U.S.A.

## "KILSLUG"

The only remedy for slugs.

Price 1/6 per tin. By post, 6d. extra.

From Horticultural Sundriesmen or the **CENTAUR CHEMICAL CO., LTD.**, Bassishaw House, Basinghall Street, London, E.C.2

## A well- filled Garden

A well-filled garden  
needs to be  
well fed.

Nitrate of Soda  
together with phos-  
phates and potash  
give the necessary  
nourishment.

Write for special pam-  
phlet, entitled, "Success-  
ful Gardens for Every  
Amateur," "The Manur-  
ing of Orchards and Fruit  
Trees," supplied gratis  
and post free by THE  
CHILEAN NITRATE  
COMMITTEE, Friars  
House, New Broad Street,  
London, E.C. 2.

*Nitrate of Soda*



# THE GARDEN.

## NOW IS THE TIME TO SOW—

**EBBS' EXHIBITION RUNNER BEAN.**  
Finest variety in existence. 1st Prizes Everywhere, 1/- and 2/6 pkt.  
**EBBS' ECLIPSE RUNNER BEAN.**  
Extremely popular, 2/6 per pint.  
**EBBS' BOUNTIFUL DWARF BEAN.**  
The Best Dwarf Bean, 2/6 per pint.  
**EBBS' SELD. CANADIAN WONDER D. BEAN.**  
A well known sort, 1/9 pint.  
Illustrated catalogue, post free.  
**EBB AND SONS, LIMITED, THE KING'S SEEDSMEN, STOURBRIDGE.**

**WATERER'S GOLD MEDAL RHODODENDRONS** and Azaleas, Rare Hardy Shrubs, Alpine and Perennial plants, Vegetable and Flower Seeds, Outdoor Chrysanthemums, Bedding Plants and Dahlias. Catalogues Free.—**JOHN WATERER, SONS AND CRISP, LIMITED, Twyford (Berks.), Bagshot (Surrey), and London.**

**WAKELEY'S PATENTED HOP MANURE.**  
The original and only substitute for Stable Manure. See advert on back cover.

**WM. DUNCAN TUCKER & SONS, LTD.,**  
Lawrence Road, South Tottenham, N.15.—Conservatories, Winter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**BIRDS' BATHS, GARDEN VASES, SUN-ALS, NESTING BOXES.** Catalogue (No. 4) free.—**MORTON, 60, Buckingham Palace Road, S.W.**

**RIVERS' ASPARAGUS.**—Strong roots, one, two and three years old. Fruit trees, Roses, Vines and Orchard trees of first-class quality. A large stock always on view. Inspection invited. Price list post free.—**THOS. RIVERS AND SONS, LIMITED, The Nurseries, Sawbridgeworth, Herts.**

**GARDEN SPADES, SPECIAL, 2/6, HAND RUBBERS, 1/6.** Carriage Paid.—**MCINTOSH, Forgue, Aberdeenshire.**

**TANNED GARDEN NETTING, small mesh,** 1 yd. by 1 yd., 2s.; 25 yds. by 2 yds., 4s.; 40 yds. by 1 yd., 3d.; 40 yds. by 2 yds., 6s. 6d.; 40 yds. by 3 yds., 9s. 9d.; carriage paid. Compare our netting with others. Lists now ready.—**GALLOP, Net Manufacturer, Hastings. Telephone: 352.**

**DO LOVERS OF ROCK GARDENS.**—Inexpensive plants for Sale. Apply **NELL SHAW, Hatfield Place, Herts.**

**WELLS' CATALOGUE OF CHRYSANTHEMUMS** now ready, and will be sent post free on application.—**WELLS & Co., Merstham, Surrey.**

**WM. ARTINDALE & SON, Nether Green Nurseries, Sheffield,** will be pleased to send their Catalogues of Hardy Plants, Seeds and Gladioli on request.

**TENNIS BOUNDARY NETTING, 50 yds. x 20 ft., 20/-.** Iron Standards, 9 ft., 3/- each. 'Tennis Nets from 1/- each. Sports Lists now ready.—**GALLOP, Net Manufacturer, Hastings.**

**SWITCH RARE SEEDS.** Catalogue describing nearly 3,000 kinds now ready. Free on application to **COMPSON & MORGAN, London Road, Ipswich.**

**DR 10/-** I send free to you 14 rooted and cuttings of Carnations in 7 of the best named new varieties and 7 different colours.—**P. GEYER, Horticulteur, St. Jean, Antibes, A.M., France.**

**JULL OF WISE SAWS AND MODERN STANCES** our catalogue offers all that is brightest and best of the present day garden. The choice plant at Sixpence a year may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—**FEILDEN AND CROUCH, 2, Great Nurseries, Wrotham, Kent.**

**ROCK PLANTS. RARE SPECIES, AND GARDEN HYBRIDS.** List Free. Rock Garden always open for inspection.—**MISS TAYLOR, Quarry Orchard, Cleurs, Reigate.**

**NEW ZEALAND PLANTS** for Seaside gardens.—**Pittosporum nigrescens** for hedges, pot grown plants for planting, now 18/- per doz. **Olearia Macrodonia**, 12/- doz., splendid for hedges. **Olearia Haasti**, 1 ft., 1/- per doz. **Brachyglottis repanda**, 2/6 and 3/6 each. **Muhlenbergia indivisa**, 2/6 each. **Ozothamnus**, 2/6 each. **Muhlenbergia complexa**, 1/6 each.—**TRESEDER & Co., The Nurseries, Rye.**

**BARR'S LARGE-FLOWERED GLADIOLI** for May planting.—Descriptive List of the most decorative and beautiful varieties in cultivation, post free.

**BARR'S SEEDS FOR MAY SOWING,** for Vegetable and Flower Garden, Rock Garden and Greenhouse. Finest selected strains and tested growth. Special List Free.—**BARR AND SONS, 11, 12 and 13, King Street, Covent Garden, London, W.C.2.**

**THE DOUGLAS CLOVES AND BORDER CARNATIONS;** glorious scent, stiff stems, and continuous flowering. The new crop of seed is now ready to sow. 2s. 6d and 5s. per packet. Plant catalogue now ready.—**J. DOUGLAS (The Premier House for Carnations), Gt. Bookham.**

**IRON AND WIRE FENCING FOR GARDENS.**—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—**BOULTON AND PAUL, LIMITED, Norwich.**

**SEWAGE DISPOSAL FOR COUNTRY HOUSES.**—No emptying of cesspools; a perfect fertiliser; no solids; no open filters: perfectly automatic; everything underground. State particulars.—**WILLIAM BEATTIE, 8, Lower Grosvenor Place, Westminster.**

**JAMES BACKHOUSE, F.L.S., F.R.H.S.,** for many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to **CAER FEGLA, Arthog, North Wales.**

**LAXTON'S STRAWBERRIES AND FRUIT TREES.**—We shall be exhibiting at Chelsea Show our New Strawberries for 1925, and the old ones. Large Tent, Stand No. U.—**LAXTON BROTHERS, Bedford.**

**ROCK PLANTS, best varieties, inexpensive,** list free.—**MARION GLEDSTANES, Fardross, Clogher, Ireland.**

**CHOICE NEW CHRYSANTHEMUMS.**—Our Catalogue of nearly 900 varieties, including Grand Novelties for 1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready. Post free on application.—**J. W. COLE AND SON, Chrysanthemum Specialists, Peterborough.**

**PRIMULA, ALPINE AND PERENNIAL SEEDS,** from large (1,500) collection, sold cheap. List free.—**REV. J. F. ANDERSON, Glenn Hall, Leicester.**

**GARDEN NETS.**—Best tanned, small mesh, 25 yds. by 1 yd., 2/-; 25 yds. by 2 yds., 4/-; 25 yds. by 3 yds., 6/-; 25 yds. by 4 yds., 8/- Carr. Paid. Satisfaction guaranteed. Tennis nets from 10/-. Special nets for tennis boundary. Pea training nets. Lists and samples free.—**G. JARRETT, Net-maker, Rye.**

**VANCOUVER ISLAND** and Pacific Coast rare ornamental alpine and lowland plants, bulbs, etc. Only those difficult or impossible to obtain in England are offered. Plants well packed and despatched at the right time of year arrive in good condition. Write for list.—**J. BENNETT, Lake Hill P.O., Victoria, B.C., Canada.**

**GENTIANA FARRERI, 2/- and 2/6;** G. acaulis, 4d.; dozen, 3/6. Pompadour Primroses, 2/- each, etc. Postage extra.—**WYNNE, Avoca, Ireland.**

**CRAZY PAVING.**—Dwarf Walling, Rockery Stone direct from quarries. Cheapest and most artistic on market.—**CLAYTON AND HAMMOND, LIMITED, 53, Baker Street, W.1.**

**SUNDIALS, BIRD BATHS, VASES.**—In Imperishable Reconstructed Stone. Write for catalogue G.2.—**CLAYTON AND HAMMOND, LIMITED, 53, Baker Street, W.1.**

**LOOK! TANNED GARDEN NETS.**—All orders despatched same day. 25 yards by 1 yard, 2/-; 25 by 2, 4/-; 25 by 3, 6/- Odd netting for bushes, 6 lbs. for 2/6. All carriage paid. Any sizes supplied. Also Tennis Boundary Nets.—**MOORE & Co., Net Works, Rye.**

**FOR SALE.**—Green's 24in. Pony Lawn Mower in good working order, £10.—Apply **TEMPLEHILL, WATERBECK, LOCKERBIE.**

## SUTTON'S WALLFLOWERS.

The cultivation of the Wallflower was revolutionised when we introduced the wonderful Orange-Scarlet varieties, and we strongly recommend flower lovers to try the following:—**SUTTON'S FIRE KING** (orange-scarlet). **SUTTON'S ORANGE BEDDER** (vivid orange). **SUTTON'S CLOTH OF GOLD.** **SUTTON'S GIANT VULCAN** (a fine crimson variety). Each Per Packet, 2/6 and 1/6.  
**SUTTON AND SONS, THE KING'S SEEDSMEN, READING.**

**BATH'S SELECT SEEDS AND PLANTS.**—New Illustrated Catalogue of choice Vegetable and Flower Seeds and Plants is now ready, and will be sent post free on application.—**(Dept. E), R. H. BATH, LTD., Floral Farms, Wisbech.**

**CHEAP GOVERNMENT WIRE!!!** Great for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760 yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—**GREEN'S GOVERNMENT STORES, 69, Albert Street, Lytham.**

**108 GLADIOLI** for 8s. 9d. post paid.—The most dazzlingly brilliant flowers on earth, with spikes of blooms 18 ins. long; 12 each of 9 kinds (108 bulbs), all separately packed and named, for 8s. 9d., post paid; half lot, 4s. 9d., post paid (cultural instructions and beautifully illustrated Flower and Vegetable Catalogues included).—**J. KAY AND CO., Goodmayes Road, Goodmayes, Essex.**

**BEGONIAS AND GLOXINIAS.**—Kay's prize strain with blooms often measuring 8 ins. across: a collector of 12 Single and 12 Double Begonias, also 6 Gloxinias—all separately packed and named, with cultural instructions and illustrated catalogues, for 6s. 3d., post paid; half lot, 3s. 6d., post paid.—**J. KAY AND CO., Goodmayes Road, Goodmayes, Essex.**

**HERRING NETS** for protecting seeds, fruit, etc., approximately 100ft. by 30ft., 11/6 each. Other nets, better quality, 21/- each. Carriage paid. Cash with order.—**WM. G. GRIGOR, Earl Street, Port Gordon.**

**DOBBIE'S 1925 CATALOGUE AND GUIDE,** 136 pages, 194 illustrations. Free to all readers. Please mention **THE GARDEN** when writing.—**DOBBIE & Co., LTD., Edinburgh.**

**HEDGING PLANTS.**—**PRIVET.**—Strong English-grown, bushy and well rooted: 30-36ins. .. at 13/- per 100. 36-40ins. .. at 15/- per 100. **QUICKTHORN.**—Extra bushy: 24-30ins. .. at 10/- per 100. Carr. Pd. on 1,000 Lots.—**HODSONS, Castlegate, Nottingham.**

**MICHAELMAS DAISIES.**—Pyrethrums and other hardy perennials. For new catalogue write to **MRS. THORNELEY, Nursted, Devizes.**

**GOVERNMENT TROUSERS AND JACKETS,** New, 6/9; Soiled, 3/9. Post Free.—**MCINTOSH, Forgue, Aberdeenshire.**

**GARDEN NETTING.**—Best selected, small mesh, tanned, 25 by 4 yds., 8/-, or 8 yds., 16/- Carriage paid. Tennis Nets and Standards. List free.—**STRAWBERRY NETTING Co., 5, Suffolk Terrace, Lowestoft.**

**CAULIFLOWER PLANTS.**—BEST (Autumn sown) Plants, Early London and Walcheren, 12/6 per 1,000; prompt delivery, carriage paid; cash with order. Special quotations for large quantities, and Price List of all varieties of autumn-sown Cabbage Plants (including Brussels Sprouts, etc.), grown from our famed Select Stocks, at lowest prices, on application.—**JOHN GILLIES, PRESTONPANS, LIMITED, Prestonpans, East Lothian.** Largest Cabbage Plant Growers in Britain. Established over 50 years. Telegrams, "Plants, Prestonpans"; Telephone: 24, Prestonpans.

**MATTHEWS' big production Fertilisers.**—Thousands of tons sold annually. For prices, see **THE GARDEN**, January 24th, 1925 (page vii). Catalogue of Scotch Seed Potatoes and Seeds on application.—**JAMES AND GEORGE H. MATTHEWS, Harold Wood, Essex. 'Phone Romford 234.**

**GREENHOUSE PAINTING AND GLAZING,**—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7lb. tins., 4/- post free; 14lb. tins., 5/6, each, carriage extra, tins free.—Full particulars from **W. CARSON & SONS, Grove Works, Battersea, S.W.11.**



### Unique Collection of HARDY PLANTS from SCOTLAND

Primula Littoniana, "Giant Form."  
P. pinnatifida. P. vincæflora.  
Meconopsis integrifolia. M. Pratti.  
Omphalodes Luciliae.

See our Exhibit at Chelsea, on Table "K," of  
these Novelties.  
CATALOGUE FREE ON REQUEST.

### OLIVER & HUNTER,

Hardy Plant Specialists,  
MONIAIVE, DUMFRIESSHIRE.

Please mention THE GARDEN when writing.

### YARD LONG RUNNER BEAN GIANT SWORD

The Most Wonderful Runner Bean in the World, one pop  
enough for one person.

40—1/6, 80—2/3, 120—3/- 200—5/-

GIVEN FREE WITH ALL ORDERS—Packet of Golden  
Balloon Prize Winning Onion Seed. Onions grow 2-5 lbs.  
in weight. Also packet of Spiral Brussels Sprouts Seed.

H. GALE, King's Somborne, HANTS.

Please mention THE GARDEN when writing.

### WATTS' POLYANTHUS PRIMROSES

1st Class Certificate Nat. Prim. Society

YELLOW	-	-	per pkt.	1/-	2/6
YELLOW and WHITE	-	-	"	1/-	2/6
WHITE	-	-	"	1/-	2/6
RED, CRIMSON and DARK	-	-	"	1/-	2/6
MIXED	-	-	"	1/-	2/6
BLUE and VIOLET	-	-	"	1/-	5/-

The Welsh Bulb Fields :: St. Asaph

Please mention THE GARDEN when writing.

### TANNED GARDEN NETS

Small Mesh for Seeds and Fruit Protection			
60 yds. long, 1 yd. wide	5/-	60 yds. long, 4 yds. wide	20/-
60 " 2 "	10/-	60 " 5 "	25/-
60 " 3 "	15/-	60 " 6 "	30/-

Half Lengths supplied.

### STOUT BLACK NETS

for Tennis Court Bordering, with Lines Top and Bottom.

30 yards long, 2 yards wide	20/-
30 " 3 "	30/-
30 " 4 "	40/-

Standards for same, 10 ft. high, 3/6 each. All carr. paid.

H. ROBINSON,  
Garden and Tennis Net Works, RYE.

Please mention THE GARDEN when writing.



### WATTLE HURDLES

6 feet long

24, 30, 36, 42, 48, 54, 60, 72 inches high

PLEASE STATE QUANTITY

ERNEST R. SMITH & CO., Haslemere, Surrey

Please mention THE GARDEN when writing.

### "ACME" WEED KILLER AND LAWN SAND

Weed Killer.—Tin to make 25gals. 3/-; for 50gals., 6/-;  
Postage 9d. on each; for 150gals., 15/- carriage paid.

Lawn Sand for destroying weeds and moss.—28lbs., 7/-;  
56lbs., 13/-; carriage paid on lowwt., 25/- Fertilizes the  
grass.

Acme Chemical Co., Ltd., Tonbridge, Kent

Please mention THE GARDEN when writing.



### FOSTER & PEARSON LIMITED

Established 1841

Please write for Estimates  
for durable Greenhouses,  
Boilers, etc., to

BEESTON  
NOTTS

### New Dwarf Single Bedding Dahlia "COLTNESS GEM"

(Brilliant Scarlet.)

The original Stock introduced by me in 1918.  
Height 18 inches; no stakes required. Makes  
a striking bed and flowers all season until cut  
down by frost. The ideal plant for public parks  
and open spaces, also for large and small gardens.

Award of Merit, R.H.S. Dahlia Trials, 1923.

Price 10/- per dozen, post free. May Delivery

### Dwarf Bedding Dahlia, Dunecht Yellow

(NEW), Seedling from "COLTNESS GEM,"  
same height and habit.

Price 12/- per dozen, packed and post free.

D. G. PURDIE, 6J, Waterloo St., Glasgow

Please mention THE GARDEN when writing.

### "KILSLUG"

The only remedy for Slugs.

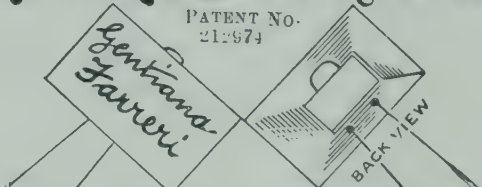
Price 1/6 per tin. By post, 6d. extra.

From Horticultural Sundriesmen or the CENTAUR CHEMICAL  
CO., LTD., Bassishaw House, Basinghall Street, London, E.C.2

Please mention THE GARDEN when writing.

### The WIZARD Plant LABEL

PATENT No.  
212974



Made in Red Pottery, 2 1/4 x 1 1/2 ins., with rustless wires,  
12 in., 2/- doz.; 7 in., 1/7 doz. 1 1/4 x 1 in., with wires 6 in.,  
1/4 doz. For tying on, 1/6 and 1/3 doz. Waterproof  
Ink, 9d. and 7d. bot. Crow Quills, 2d. Postage extra.

Highly commended by the R.H.S. at Wisley.

E. TORKINGTON · NEW HALL · MAIDENHEAD

### CRISP'S PERENNIAL BROCCOLI

Lasts many years and gives a crop  
each year of from 5 to 12 good heads.

SOW SEED NOW, 1/- per Packet; or place  
your order for plants to be sent in May, 1/- per  
doz., 5/- per 100.

H. C. GROOM & CO., 5, Guilden Sutton, CHESTER

Please mention THE GARDEN when writing.



### FERTILISERS.

LAWNS, 20/-; FRUIT TREES, VINES, 19/6;  
GENERAL GARDEN USE, 17/-;

WORM KILLER, newly introduced, 19/-  
Per cwt., carriage paid. Also all other fertilisers.

HY. RICHARDSON & CO.,  
Skeldergate Bridge Works, YORK

### HARDY ORCHIDS For Present Planting. Strong Plants.

Cypripedium acaule, 3/6 ea. Cypripedium calceolus, 2/6 ea.  
Cypripedium spectabile, 3/6 & 5/- ea.  
Orchis foliosa (in pots), 2/6 ea. 24/- per doz.

T. SMITH, Daisy Hill Nursery, Newry, Co. Down

### CRAZY PAVING

Lumps for Rockeries, etc.  
4 Ton Lots and upwards.

HENRY L. COOPER & Co., 29, Mark Lane,  
LONDON, E.C.3



ROCKRAVEN GARDEN STONE  
COMPANY SUPPLY POROUS LIME-  
STONE ROCKS FOR ALPINE SUBJECTS:  
WEATHER-WORN BY THE STORMS  
OF CENTURIES INTO DELIGHTFUL  
POCKETS, LEDGES AND FISSURES.  
:: VARIED SHAPES AND SIZES ::

APPLY: SECRETARY.  
LINTON-IN-CRAVEN, SKIPTON, YORKS

ROYAL



SHOW

### CHESTER

July 7th to 11th, 1925

84TH ANNUAL EXHIBITION of LIVE STOCK  
POULTRY, DOGS, AND FARM PRODUCE. HORSE  
JUMPING. AGRICULTURAL EDUCATION, FORESTRY

### HORTICULTURE

Entries close May 27th

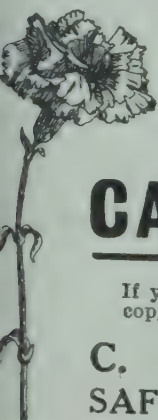
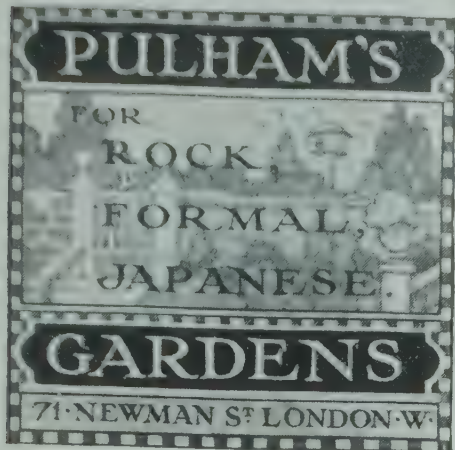
(Live Stock entries close May 1st.)

Prize-Sheets and Entry Forms will be forwarded  
on application to

T. B. TURNER, Secretary

ROYAL AGRICULTURAL SOCIETY OF ENGLAND,  
16, Bedford Square, London, W.C.1.





1925

CATALOGUE of  
Perpetual-Flowering

## CARNATIONS

If you are interested and would like a copy, post your name and full address to:

C. ENGELMANN, Ltd.,  
SAFFRON WALDEN, Essex

Please mention THE GARDEN when writing.

Try our "Marvel" Collection of dependable seeds for a 300 yards' plot, carriage paid for 5/- Potatoes excluded! Catalogue included!

SPRINTONES, Seed Experts, ROTHERHAM

Please mention THE GARDEN when writing

## CARNATIONS for Garden & Greenhouse



### PERPETUAL FLOWERING (Greenhouse) Varieties

We carry large stocks—rigidly selected—of all the best varieties. For immediate flower we offer fine plants in 6" pots in bud. Young stock, ex 3 1/2" pots, stopped and broken, to pot along, or plant, ready now.

All Collections are carried and packing paid for cash

6 plants	6" pots	ex 3 1/2" pots
in variety	24/-	8/6
12 " "	45/-	16/-
25 " "	80/-	30/-

### ALLWOODII (Half Pink, half Carnation)

New and delightful self colours have been introduced in the ever popular Allwoodii—the hardy plant which grows and flowers in every garden and window-box. The collections quoted below are exceptional value, and include many quite new and unique varieties.

6 plants in variety, 6/6 12 plants in variety, 12/- 25 plants in variety, 22/6

### HARDY PERPETUAL BORDER CARNATIONS

Will eventually supersede the old Border type, being hardier, freer flowering, carrying bolder and more sweetly perfumed flowers. A much wider range of colour is now obtainable, and the following collections are first-class value, embracing many of the later kinds. All plants ex 3 1/2" pots—immediate delivery.

6 plants in variety, 15/- 12 plants in variety, 27/6

CATALOGUE of all CARNATIONS POST FREE ON REQUEST but order the above collections at once for prompt delivery, and exceptional value.

The leading  
Carnation Raisers  
and Specialists  
in the World.

Dept. 4, Haywards Heath, Sussex.

Please mention THE GARDEN when writing

# REAMSBOTTOM & CO'S GAY GARDEN ST. BRIGID ANEMONES

NONE GENUINE WITHOUT OUR GOLD MEDAL SEAL  
Wonderfully improved in Form and Colours.

FEW FLORAL SIGHTS CAN  
COMPARE WITH A GOOD  
BED OF THEM.

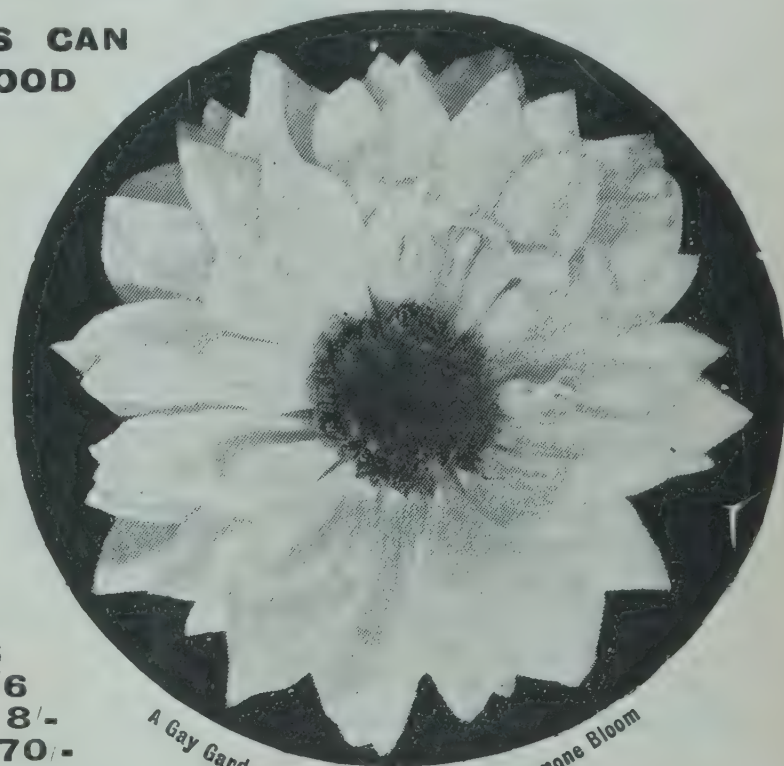
## PLANT NOW.

REAMSBOTTOM & CO.'s  
LATEST IMPROVED  
"GAY GARDEN"  
GOLD MEDAL ST.  
BRIGID ANEMONES

are the finest in the world.  
NONE ARE GENUINE WITH-  
OUT OUR GOLD MEDAL SEAL

12	..	..	..	3/-
24	..	..	..	5/6
50	..	..	..	9/6
100	..	..	..	18/-
1,000	..	..	..	170/-

Full Cultural Directions sent that  
will ensure success to every Amateur



A Gay Garden Gold Medal St. Brigid Anemone Bloom

## ALSO PLANT NOW

LUPINUS ROSEUS (Pink Lupins). Our glorious strain of these hardy perennial Lupins, most lovely shades of pink. 2, 1/3; 6, 3/-.

DELIGHTFUL, FRAGRANT, SPRING-FLOWERING AURICULAS. Lovely rich velvety colours, vastly superior to those usually seen. If you do not appreciate Auriculas, try ours, and you will be delighted. 6, 2/6; 12, 4/9.

CARNATION, EARLY FLOWERING FRENCH. Single and giant double flowers of exquisite mixed colours, very fragrant, 6, 2/-; 12, 3/6.

ASTER KING GEORGE (NEW). Extra large-flowering Michaelmas Daisy; huge bluish-violet blooms, 1/6.

MYOSOTIS ROYAL BLUE. Dark intense electric blue; strong grower. 15, 1/6; 100, 7/6.

MYOSOTIS VICTORIA. (Hen and Chickens Forget-me-not). Sweetest little blue. 12, 1/6; 24, 2/9; 100, 8/6.

LOBELIA CARDINALIS, QUEEN VICTORIA (The Cardinal Flower). A most exquisite dazzling flower, 3ft. to 4ft. high, vivid flowers and foliage. 3, 1/4; 6, 2/6; 12, 4/6.

LUPINUS POLYPHYLLUS. Purple and white, 4, 1/3; 12, 3/-.

FRAGRANT TREE LUPIN. White. 2, 1/4; 6, 3/6.

PHLOX EVELYN (NEW). Large flowers and immense size, richest salmon-rose shade, an exquisite novelty, 1/6.

PHLOX FIREGLOW (NEW), huge trusses of brilliant orange-scarlet, with dark centre, 1/6.

For other varieties, also Roses, Fruit Trees, etc., please see our ILLUSTRATED CATALOGUE FREE. All Cash orders of 15/- value and over carriage paid or post free, packed by experienced hands. For Free Delivery, smaller orders, 5/-, 10/-, add respectively for Carriage or Postage, etc., 1/- and 1/9. Safe Arrival and Satisfaction Guaranteed.

PAPAVER KING GEORGE (striking novelty), bright scarlet, with imbricated petals. 1/3 each.

PAPAVER MAHONY. Chocolate colour, rare. 1/6.

GAILLARDIA GRANDIFLORA. Our splendid improved extra large-flowered; choicest rich yellow, with crimson or brown markings. 4, 1/4; 12, 3/6.

GENTIANA ACAULIS. The glorious Blue Gentian, prized wherever a hardy flower is grown. Very dwarf. Likes a loamy soil, with broken stones mixed through it. Extremely hardy. 3, 2/3; 12, 7/6.

PINKS, EXCELSIOR, blush with scarlet centre. A strong favourite, 6, 2/6; 12, 4/6.

PRIMULA OBCONICA GRANDIFLORA HYBRIDS. Very beautiful Primulas; most valuable window or garden plants; never seen to be out of bloom, 3, 1/6; 6, 2/9; 12, 5/-.

SWEET WILLIAMS. Wonderful Giant Mixture. Our strain is a wonderful variety of colours, and customers are always delighted with the very large flowers. Giant mixture. 15, 1/9; 50, 5/-; 100, 9/6.

EDELWEISS. This very hardy, much-sought-after alpine plant has pretty silvery foliage, with star-shaped, silvery flowers. 2, 1/3.

MIMULUS OR MONKEY FLOWER. Superb giant-flowered strain, hardy free blooming plant, covered for months with blotched and spotted flowers, 6, 1/6; 12, 2/9; 24, 5/-.

BERGAMOT (MONARDA DIDYMA). The deliciously scented true fragrant Bergamot, with striking scarlet flowers, 2, 1/4.

# REAMSBOTTOM & CO.

Tower Nurseries, West Drayton, Middlesex (Also at Geashill, Ireland)

Please address to Tower Nurseries, WEST DRAYTON, and mention THE GARDEN when writing.

FREE MONEY SAVING BONUS COUPON.—20 per cent. worth of Additional Plants FREE and delivered carriage paid on orders over 15/- value if you enclose this coupon. — Quality superb. — T.G.



# McDOUGALL'S PERFECT SAFETY WEEDKILLER (NON-ARSENICAL)

This Weedkiller is recommended to those who desire a preparation which can be used without the slightest danger of poisoning Human Beings, Domestic Animals, Poultry, Game, etc.

Pint tins 1/6 1 gal. tins 6/6  
Quart " 2/6 5 " " 25/-  
1/2 gal. " 4/- 40 " casks £7/10

Use 1 pint of Weedkiller  
to 3 gallons water.

Sold by Seedsmen, Nurserymen,  
Ironmongers, etc.

If you cannot procure it locally,  
apply direct to

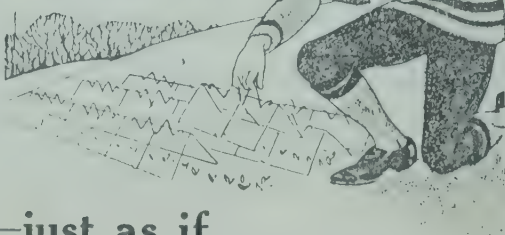
**McDOUGALL & ROBERTSON, Ltd.,**  
**BERKHAMSTED, Herts.**  
(Formerly of Manchester.)



*Perfect  
Safety*

Please mention THE GARDEN when writing.

## "Fine!"



—just as if  
they'd had  
nothing but sunshine!

For General Use  
send for this case of  
"A" pattern Cloches.  
Each Cloche 7ins. high.  
Case contains 12  
Cloches, cover-  
ing 14 feet .. 18/-

For Larger Plants  
order "B" Cloches.  
9ins. high. Set of 15,  
enough to cover  
22 1/2 feet .. 35/-



Carriage  
Paid  
Home.

(Scotland  
2d. in 1/-  
extra.)

THE CHASE CONTIN-  
UOUS CLOCHE lets in all  
the sunshine and traps it—  
keeping your young plants  
always healthily warm during  
the coldest days and nights.  
Perfect ventilation. No cod-  
dli g. No transplanting needed.  
Need not be removed for  
watering. Plants grow under  
it just as they would in the  
open in CONTINUOUS  
perfect weather.

Full particulars and  
prices in  
**FREE BOOKLET**  
No. 7  
from

**Chase**  
**Continuous Cloche**  
*A Trap to catch the Sunbeams*

Dept. 7, Chertsey, Surrey



## Notes from Maidstone.

### GRAPES AND FIGS FOR COLD GREENHOUSES.

The following can be recom-  
mended for planting NOW:

Grapes.—Black Hamburg—  
without doubt the best all-  
round grape for a cold house.  
It sets freely and is easy to  
cultivate, essentially the  
Amateur's Grape. Of the  
white varieties, Foster's Seed-  
ling is the best; it sets well,  
crops freely, the skin is thin  
and the flavour most refreshing.

Planting Canes, 10/6, 15/-  
and 20/- each.

Figs.—These are most suc-  
cessful fruits for cold houses;  
perhaps the most popular is  
Brown Turkey, but there are  
other dark varieties easy to  
grow. Among white varieties,  
White Ischia is particularly  
good. Small plants, 5/- each;  
larger, 7/6 and 10/6 each.

VEGETABLE AND FLOWER  
SEEDS.—We would remind readers  
that our seeds are nearly as famous as  
our Fruit and invite a trial. Cata-  
logues free.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.

No. 4



The  
Park Keeper

## Men who appreciate

The  
**ATCO**  
MOTOR MOWER

The letter shown above, received from the Corporation Parks  
Committee of a leading city, amply proves the adequacy of  
the ATCO Motor Mower where large extents of grass have to  
be maintained in good condition.

The ATCO is used regularly by many leading Corporations.  
May we arrange free demonstration on your own grass?

16 inch Model £50 22 in. Model £75. 30 in. Model £95  
Personally Delivered and Guaranteed 12 months—

5 per cent. for cash in 7 days.

All who take a pride in their Lawns should send for free  
ATCO Booklets, "Turf Needs" and "Notes of Praise."

**CHAS. H. PUGH, Limited**

Whitworth Works, 31, Tilton Road, BIRMINGHAM

CITY OF BIRMINGHAM  
PARKS AND CEMETERIES DEPARTMENT.  
PITMAN BUILDING,  
161, CORPORATION STREET,  
BIRMINGHAM.

TELEPHONE NO.—  
Central 4370-7-8-9.  
ESW/AMW

26th March 1924.

ALL COMMUNICATIONS TO BE ADDRESSED TO THE SECRETARY

Dear Sirs,

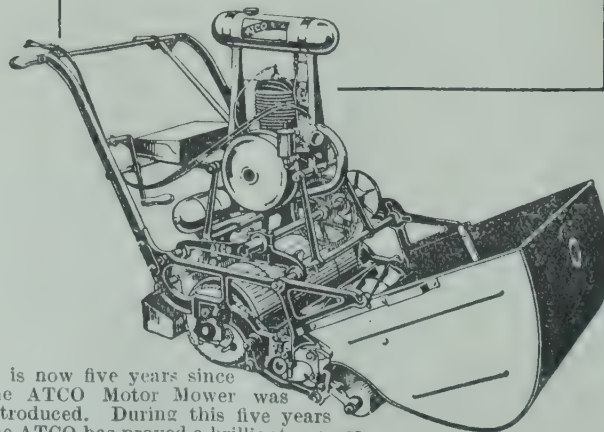
Atco Motor Mowers.

I beg to inform you that the Parks  
Committee of this City were so satis-  
fied with the working of the motor  
mower obtained from you last year for  
trial purposes, that they have now  
given instructions for twelve more to  
be obtained, and an order has been sent  
to you for these machines.

Yours faithfully,

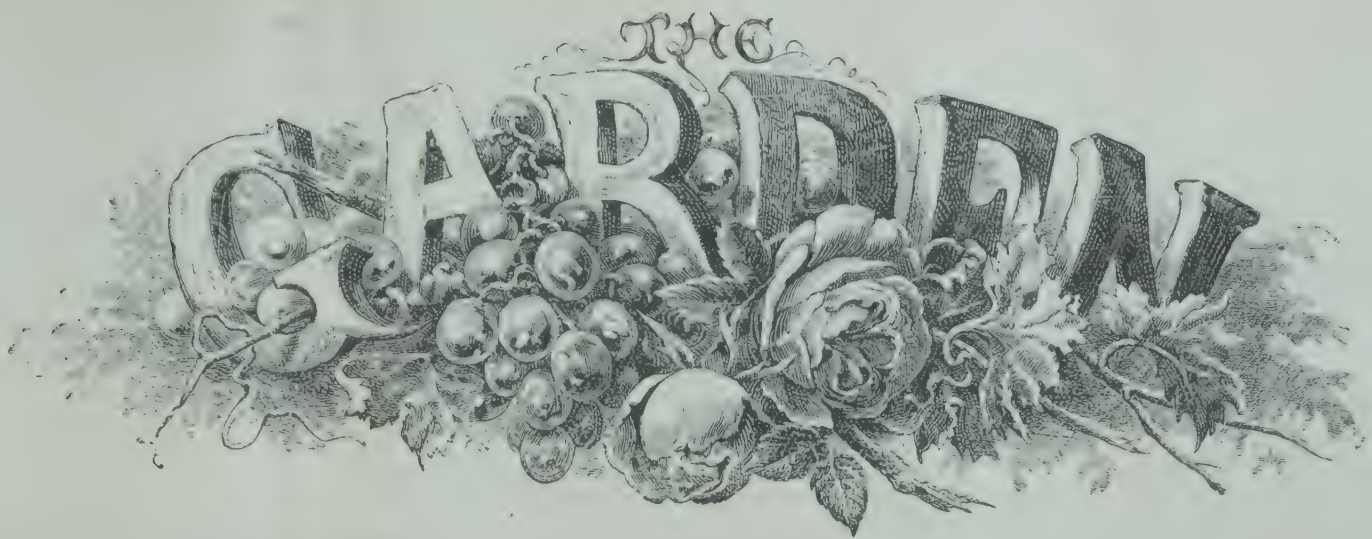
*J. H. White*  
Secretary.

Messrs Charles H. Pugh Ltd.,  
Whitworth Works,  
Tilton Rd.



It is now five years since  
the ATCO Motor Mower was  
introduced. During this five years  
the ATCO has proved a brilliant success  
in the hands of every class of user.





VOL. LXXXIX.—No. 2790.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
Entered as Second-class Matter at the New York, N.Y., Post Office.

MAY 9, 1925

## COLLECTING PLANTS

IN this issue will be found the second portion of Mr. H. Stuart Thompson's article on plant holidays. There is nothing I can add to such an expert's advice except, perhaps, a few words on the actual collecting of plants and their identification. It is obvious from the increasing numbers of gardening enthusiasts who collect plants for their own gardens, whether at home or abroad, that everyone feels a satisfaction in growing plants which they have found for themselves and dug up with their own hands. There is something personal in the feeling that a collector has for a plant found by himself. He shows it off with pride and tends it with the greatest care, which is only natural, for there is nothing like a plant for recalling a happy day spent in the mountains.

In collecting plants three things are necessary in the field: something in which to carry them, something with which to dig them up, and a supply of labels. The main necessity in a receptacle is that it should be easy to carry; a fishing basket is excellent provided that it is curved so as to fit your shoulders, and the same thing applies to a collecting tin. Both of these are better than a bag or rucksack, for, being rigid, the plants can be packed tighter and are not so easily bruised or broken. A trowel is an absolute necessity if the roots are to be dug up without serious damage. Farrer invented a trowel which was by far the best for the work in the field. Instead of widening towards the handle, it was the same width throughout its length; the blade measured about 8ins. by 2ins. I believe that trowels after his pattern used to be sold by the Army and Navy Stores, but I do not know if they are still stocked. The labels should have a sufficient length of string attached to enable you to tie them firmly to a good-sized plant.

It may appear to be finicky to say that labels are a necessity, but this is really not the case. It is impossible even on a single day's excursion to remember exact details about each plant, and in order that it may have every chance in your garden, conditions should be approximated as nearly as possible. Every specimen should be clearly labelled with colour of flower, position, soil, water, sun or shade, orientation, altitude, if solitary or in clumps, and, if possible, what its near associates are. These are all important if its well-being in a home garden is to be catered for.

When you actually dig up a plant, make sure that you are taking sufficient roots and are disturbing them as little as possible. Thus, in an alpine meadow a wedge of turf should be dug up with the plant, a little moss with a plant from a rock, and so on. In most cases it will live quite happily with no attention for a fortnight or more, if it is collected in this way. When they are packed for transport home, they should be packed as tightly as possible.

Although thorough identification requires a botanical training, yet it is both instructive and amusing to try to name the plants you have collected. It is a mistake to imagine that a library is a necessity; for one thing, the more authorities you use the more muddled you will become. For British plants the beginner would do well to use "Haywards Botanists' Pocket Book" (Bell and Sons, 5s. net); while the gardener with some idea of families and genera will find Bentham and Hooker's "British Flora," 2 vols. (L. Reeve, 12s. net each), by far the most complete and useful. In the same way, in the Alps an invaluable book for the beginner who only wants to name his finds approximately is "The Alpine Flora for Tourists and Amateur Botanists," by Dr. Julius Hoffman, translated by E. S. Barton, with 283 coloured figures, new edition (Longman's, Green, 1925, 12s. 6d. net). The plates are particularly good, and for those to whom collecting is only a side line on a holiday, this small book is all that is necessary. Again, for those who are more advanced there are two splendid volumes by Mr. H. S. Thompson, the author of our articles, called "Alpine Plants of Europe" and "Sub-Alpine Plants of the Swiss Woods and Meadows" (the title of the latter, by the way, is a little misleading, for it covers a great part of Europe), numerous coloured plates (George Routledge and Sons, Limited, 10s. 6d. net each). Both of these volumes are exceedingly well planned and are very complete. All these books have glossaries attached which give simple definitions of botanical terms used in them.

This is not a large outfit to take away on a plant-collecting trip—a basket or tin, always useful for holding odds and ends, a trowel, labels and, at the most, two volumes.

One warning I should like to give to all would-be collectors: respect the plants and the ground in which you find them. Do not dig up more than you mean to carry away with you, and always smooth over the ground and replant any neighbours which you may disturb in removing something you fancy. Nature makes just as fine or better a garden than you can, though it may be untended.

E. H. M. C.

### AMONG OTHER ARTICLES IN OUR NEXT ISSUE WILL BE:

SOME ORNAMENTAL VINES, by A. J. Macself.

DECORATIVE GRASSES, by C. Leray.

NATURE'S ROCK GARDEN, by Halliwell Sutcliffe.

THE PALE PRIMROSE, by A. R. Horwood.



# CARNATIONS AND PINKS

DURING RECENT YEARS THE POPULARITY OF THESE CHARMING GARDEN SUBJECTS HAS INCREASED ENORMOUSLY, TO A GREAT EXTENT DUE TO THE LARGE NUMBER OF EXCELLENT NEW VARIETIES

IN common with all our popular flowers, both carnations and pinks have been greatly improved during recent years. The modern border carnation has not only a stronger and more upright stem, but there are fewer varieties inclined to split their calyces, and a wider range of colour has been obtained. Fragrance and hardiness have been preserved, and it can be truly said that, when well grown, there is no more delightful subject for the open border than the border carnation. It is far too often treated as though it were not a hardy plant. It will stand the rigours of winter in almost any part of our land, and if the plants are left undisturbed the wealth of bloom in the second season is a revelation.

The perpetual-flowering carnation is virtually a greenhouse subject, although it can be grown out of doors in the south with a certain amount of success. Its continuous blooming is one of its greatest assets, and on this point it scores over the border carnation.

The perpetual borders, or hybrid borders as they should be more correctly termed, bid fair to become popular. They have many desirable qualities, some of which are not yet recognised by many carnation lovers.

In pinks we have one or two new types that are already prime favourites. The well known Allwoodii has the habit of the pink, but a perpetual-flowering character which it inherits from one of its parents: *Dianthi Herbertii* have no carnation blood in them, but they have a very long blooming period, and the flowers are famous for their fine form and fragrance. The Pritchard pinks are another splendid new race, and they comprise many rich shades.

## THE BORDER CARNATION.

It will be generally agreed that, taken as a whole, the border carnation represents the best formed flower. The petals are clearly cut at the edges, and in the best types they are of splendid texture. In the best varieties, too, they are not too numerous or closely packed, so that the flower has a good chance of opening without "balling" or splitting the calyx. The evolution of a strain that has been well named "Cloves" has been instrumental in combining fragrance with the best attributes of the border varieties. I am not quite sure whether our hybridists, in trying to produce new shades, are not rather overdoing the fancy section and giving us many mixtures of colours that may be unique but are not altogether pleasing. That is, however, perhaps a matter of individual taste.

## THE HYBRID BORDERS.

These are only new in so far as they have been in commerce but a few years. They have been in existence for a quarter of a century. Messrs. Allwood Brothers of Haywards Heath were the first to introduce them to the gardening public, and with one exception all the varieties that they list, I believe, are of their own raising. The exception is the variety Avondale, which was raised by the late Major Paterson, and named after his residence, some fifteen

years ago. Messrs. Allwood Brothers have, doubtless, improved the original stock since it first came into their hands, and it is now listed as Sussex Avondale. I have grown practically all the Sussex varieties together with a large number of seedlings from other sources, and from my experience of them, both in the open and under glass, I am convinced that they are a coming race. Messrs. Allwood's varieties are a particularly good and useful strain. Many of them represent an excellently formed flower, *e.g.*, Sussex Pink (possibly the nearest approach to the form of a border variety of any that are at present in commerce), Sussex Supreme, Sussex Idol, Highland Lassie, Rosalind, Sussex Crimson and Sussex Scarlet. The newer introductions are particularly strong in the stem, and some of them, such as Sussex Leander and Sussex Cerise, are very floriferous.

In the seedlings that I have tried during the last two years there has been rapid evolution as regards the attainment of dwarf, bushy habit, regularity of form and smoothness of petal, the retention of fragrance and the production of many pleasing self colours. Several whites and salmon pinks appeared in the last batch, and there is already a big range of scarlet and cerise shades, together with many beautiful fancies both on white and yellow grounds. A yellow variety has also been produced.

The hybrids can be lifted from the open border in the same way as chrysanthemums, and when treated in this way they will give a succession of bloom if kept free from frost.

## DIANTHUS ALLWOODII.

These are very easily grown subjects, and will thrive in any soil if they are given a sunny situation. They soon make big plants and, as they strike readily from cuttings, a big stock can easily be obtained from an initial outlay of a few plants. During the summer they can be propagated without the aid of glass if they are inserted in a sandy soil and given a shady place until root action commences.

There are now many pleasant self colours, and those varieties that have a distinct central zone or "eye" are very pretty. In the self shades Harold is a very popular white, Marion is a lovely shade of pink resembling the Rose Dorothy Perkins, Hugh is a distinct crimson-purple, and Maud, Nell and Vera are different shades of pink. The latter is a good variety for rock-work. In the varieties that have a central colour zone Susan, Betty, Eleanor and Joan are all excellent.

## DIANTHUS HERBERTII.

I believe that there is a great future in store for Mr. Herbert's pinks. Since the original variety, Progress, appeared as the result of crossing two of the laced pinks, many beautiful shades have been produced. Of the moderately priced varieties I can particularly recommend Queen Mary (rosy pink with deep crimson base), Model (rosy pink with deep red base), Mrs. G. Walker (bright pink and rosy red), Victory (deep ruby crimson), The Imp (dark crimson),



PERPETUAL FLOWERING PINK (HERBERTII) QUEEN MARY WITH ROSY PINK BLOOMS.



May Queen (bright pink), Lyric (purple) and Gertrude (rosy mauve).

Mr. Herbert tells me that he now has scarlets, white, pink, crimsons in various shades, purple, buff and colours hitherto not seen in any carnation or pink. There are several salmon and intermediate shades, but no yellow as yet. It is certain that during the next few years we shall see great developments in this magnificent strain.

#### A FEW WORDS ABOUT CULTURE.

Mr. Montagu Allwood is of the opinion that the majority of carnation growers do not realise the fact that carnations love lime and abhor leaf-mould. Those who have admired the wonderful displays from the Wivelsfield nurseries may find much benefit if they will remember his advice. I believe that many growers are often inclined to think that the carnation will thrive if planted indiscriminately in a mixed herbaceous border and left to take its chance. It is probable that tall-growing subjects choke out the light that is essential to its well-being. Give it a sunny situation, sheltered from the winds if you can, but never overhung by trees or shrubs. If the soil has been well prepared to the depth of 1½ ft. or 2 ft. and a liberal dressing of well rotted animal manure incorporated in the lower spit, providing the soil is rich in lime, that seems all that is necessary to give the plants a good start. Plants may be obtained from the best houses ex pots, so that it is not yet too late to put out a final batch.

My article on "Border Carnations for Autumn Planting" in the issues for November 1st and 8th, 1924, raised a number of points with which I will deal briefly now.

With reference to the variety Gracefulness, one of Mr. Payne's novelties, I wrote, "this is a fine variety for growing under glass, when with the calyx eased and helped occasionally, it can be grown to a very large size," and a correspondent, "Linkman," asks for a more explicit explanation of this. When very large buds are observed these should be slit about one-third of the way down each rib on the calyx. This is known as easing the calyx and helps the bloom to open evenly. Varieties that have a tendency to burst their calyces, e.g., Lord Steyne, Princess Mary, Bookham Flame, etc., give

excellent blooms if treated in the way described. I do not think any useful purpose will be served by entering into a controversy about Mr. Morton's criticism of my last article. He merely gives his experiences of certain varieties in contrast to mine. In support of my statement that Bookham Salmon has a strong constitution, Mr. James Douglas, the



CLUMPS OF DIANTHUS ALLWOODII ARE ALWAYS EFFECTIVE IN THE ROCK GARDEN.

raiser, states that it is the strongest in the section, the next being Salmon Clove and the next Laverock. Mr. Douglas tells me that since its introduction some 17,000 plants have been grown and distributed, and no complaint of any kind has been made about it.

The form of Margaret Keep may not be perfect as an exhibitor's flower, but it is a neat, compact bloom for the border. That is the place where the *border* carnation should be grown. If grown under glass, where red spider is often a terrible pest and impregnable when once it obtains a footing, an erroneous idea of the merits of a variety is formed. My experiences of border carnations are confined to outdoor-grown plants.

NORMAN LAMBERT.

## SEASONABLE WORK AMONG HARDY SHRUBS

THE number and variety of hardy shrubs cultivated in our pleasure grounds and garden borders have vastly increased during the last two or three decades. With the increased interest in this branch of gardening has followed much improved methods of cultivation. Growers of fruit pay special attention to the preparation of the ground, transplanting, mulching and pruning. These operations are equally important for the successful cultivation of shrubs.

In spring, when the roots are in full activity, many shrubs, one might even write all shrubs, benefit by some form of mulching or top-dressing. The mulch may be applied for one of two reasons, or both, i.e., nourishment for the shrubs or to assist in keeping the soil cool and moist during the hot dry days of summer. Decayed farmyard manure is the best mulching to supply most plants with nutriment. If of a heavy nature, it can be mixed advantageously with half-decayed leaf-mould. The mulch for rhododendrons, including azaleas, should be more vegetable than animal litter. For this family of plants spent hot-bed or mushroom-bed manure is useful mixed with leaf-mould.

The question of covering or burying mulchings of manure near the house and in frequented parts of the pleasure grounds and garden may arise. In the case of newly planted shrubs it is generally a simple matter to fork in the dung lightly. With

established bushes, however, having many surface roots, it is a mistake to fork the surface indiscriminately. When it is desirable to cover the manure, sprinkle a little fine soil over the top rather than dig it in and destroy endless numbers of fibrous roots in doing so.

#### THE SPRING PLANTING

of numerous shrubs in a small state is desirable for various reasons. The cistuses, for example, suffer more from cold winds and sudden changes of wet and cold than actual dry frosts. Consequently the plants in pots are afforded the protection of a cold frame or sheltered positions until April is well advanced.

The ceanothus, both spring-flowering and the summer and autumn blooming hybrids, are mostly found to thrive best when planted during the late spring. Eucalyptus, Hibiscus syriacus and hamamelis will take root in fresh soil, if planted at the end of April onwards into May.

To obtain the full benefit of the beautiful coloured stems, the pruning of the willows, *Salix vitellina*, the variety *britzensis* and *S. daphnoides* can be deferred until towards the end of April.

#### PRUNING EVERGREENS.

During the second half of April on into May, when shrubs are getting into full activity of growth, is a good time to prune



evergreen shrubs. The trimming and shortening of thin branches and twigs may continue, as occasion arises, throughout the summer. When the proposed pruning is to be fairly hard cutting back into the old wood, this is the season of the year to do the work with the most hope of success.

In no other garden operation is the old proverb "A stitch in time saves nine" more applicable than that of pruning, and to the pruning of evergreen bushes in particular. It is often a mistake to pass a bush because it looks satisfactory for the time being. Consider rather the subsequent growth for the next few years. Several inches taken off the ends of the shoots now to induce bushy growth and the laying of a good foundation will, or may, obviate the necessity to cut off as many feet in four or five years' time. This latter will, probably, also mean disfigurement for at least a year.

This is the best season to take in hand neglected holly, yew and other evergreen hedges. It may be desirable to spread the treatment of hedges in very bad condition over a period of two or three years. If the height is to be considerably reduced, do this now, next year cut one side hard back, and the following year deal with the remaining side. Couple with the pruning the cultivation of the surface soil and the application of a good mulch of old decayed manure. Spray severely-pruned hedges morning and evening for a few weeks during hot, sunny weather. In addition water liberally if the soil is dry. Somewhat similar treatment should be afforded to certain evergreens which have outgrown their positions. In the case of flowering shrubs it may mean the loss of a season's blossoms, but if the bushes are to be kept within limits this is inevitable. It will be sufficient to cite three well known examples, *i.e.*, large-leaved rhododendrons, *Olearia Haastii* and *Veronica Traversii*.

Certain evergreens planted as hedges require attention in the matter of pruning each year after flowering, notably the *laurustinus*, *Berberis Darwinii* and *B. stenophylla*.

A few early-blooming deciduous shrubs, especially when grown against a wall or fence for protection, benefit by the shortening and thinning of the shoots. These include *Chimonanthus fragrans*, *Lonicera fragrantissima* and *Standishii*, varieties of *Cydonia japonica*, *Jasminum nudiflorum*, forsythias, *Prunus triloba flore pleno* and *P. japonica*, both double white and pink forms.

One section of forsythias, *Fortunei* and *Sieboldii* forms of *suspensa*, flower better when the young growths are pruned fairly hard back each spring after flowering. The other, represented by *F. viridissima* and the hybrids *F. intermedia* vars. *spectabilis*, *densiflora* and *vitellina*, should only have the stronger young shoots shortened.

#### TRANSPLANTING EVERGREENS.

Because the leaves of evergreen shrubs must have an uninterrupted supply of moisture from the roots throughout the year, though appreciably less in winter, a large number are not so readily transplanted as the deciduous or leaf-losing shrubs.

The best time to lift and transplant these evergreens is when life is very active and the roots can speedily establish themselves in the new positions. Generally this is towards the end of April and during the first half of May, but it varies a little from year to year according to the weather. Obviously, a showery period is ideal for the work, while the moving operations should if possible be suspended during hot, dry and windy weather.

Warm, showery days in May are favourable for the planting of hollies, yews and other evergreens from nurseries. Most

growers of these plants for sale pay special attention to frequent transplanting in the home nursery to fit them the better for the journey and safe planting in the purchaser's garden. When there is any appreciable loss of roots, considerable shortening of the leafy twigs is desirable to balance matters somewhat, until the root system again becomes normal.

Evergreen oaks, arbutuses, cistuses, pyracanthas, evergreen ceanothus and ivies are usually cultivated in pots in nurseries to overcome the difficulties of transplanting. From time to time, however, as these and similar shrubs increase in size thinning must be done, moving to fresh positions being necessary. Though the shrubs may be moved with good balls of soil attached to the roots, make a point of reducing the top growth to balance somewhat the inevitable disturbance of the roots.

The fact of growth starting with renewed energy means active leaf transpiration, hence the sooner the roots get a fresh grip of the soil the better. As soon as convenient after planting a thorough soaking with water is essential with all evergreens. It will help in keeping the ground moist to mulch freely with decayed manure. Further waterings must follow if the weather is dry, and syringe the plants mornings and evenings on hot, sunny days.

Our experience in planting a holly hedge with bushes 5 ft. in height may be helpful to some readers. We had a trench dug ready for them on arrival from the nursery. Unfortunately, though it was the middle of May, a hot, dry spell set in. As each plant was placed in position the soil was watered in, the tops sprayed and covered with tiffany. The first week this was left on and drenched with water several times daily. The next week the tiffany was removed at night, but put on during the day except on one occasion, when it rained most of the day. The tiffany was dispensed with at the end of the month, but spraying and watering when necessary was continued throughout June. Though not a drop of rain fell during the first ten days after planting, and there were drying winds, only two plants were lost out of fifty planted.

#### BAMBOOS.

May is the best month for the propagation by division and the transplanting of bamboos. At this time new growth is beginning—the obvious sign of active root action. An old well worn spade with a sharp edge is a useful tool to chop off pieces from the sides of healthy clumps. Sometimes if the root-stock is very woody when a large piece is lifted a mattock may be required to aid in the division. Small pieces with few roots are better potted up and placed in a warm, moist greenhouse for a few weeks.

A moderately moist loamy soil is on the whole best for bamboos. In selecting sites for planting, choose positions sheltered from the north and east. In wind-swept areas bamboos are an eyesore rather than objects of beauty for a good part of the year.

Six of the best hardy bamboos are *Arundinaria fastuosa*, *nitida* and *japonica*, *Phyllostachys nigra*, *viridi-glaucescens* and *Henonis*.

#### MAGNOLIAS.

Having thick and somewhat fleshy roots, great care is necessary in the planting and transplanting of magnolias. September and May are the best months for moving. It does not matter if the bushes are in flower at the present time, root growth is active and damage or loss of roots should be soon made good. Magnolias thrive best in a warm, deep, well drained loamy soil, mixing in plenty of leaf-mould and peat when planting.

A. OSBORN.

## SERVICE FOR READERS

Though so many subjects are dealt with in each issue of THE GARDEN, it must constantly happen that readers seek information which is not immediately available. In such circumstances they should make use of our new Service Department. Through its medium each reader's own particular enquiry can be dealt with. No matter what the question is, whether advice is sought as to—

RESTOCKING A GARDEN, COLOUR SCHEMES FOR GARDENS, THE BEST PLANTS FOR CERTAIN SITUATIONS, WHERE TO OBTAIN NEW AND RARE PLANTS, INSECT PESTS, NAMING OF PLANTS, AND THE HUNDRED AND ONE OTHER DETAILS RELATING TO THE GARDEN—

there is always information available from a staff of expert contributors and consultants; and there is no charge for this. It is one of the additional means of Service which THE GARDEN is glad to render to its readers.

Also, there is the further convenience which the Service Department affords of supplying readers with data about anything that is advertised in the pages of the paper. Thus, on receipt of an enquiry, particulars will be sent of, say, half a dozen things about which the reader seeks information. The only stipulation is that a stamped addressed envelope shall be sent with the enquiry.

All communications should be addressed to the Service Department, THE GARDEN, 20, Tavistock Street, Covent Garden, London, W.C. 2.



# SOME NATIVE GEMS FOR THE ROCK GARDEN

WHILE we have to go abroad for the majority of our alpine treasures, our native islands still give us some plants which are comparable to any collected on Dalmatic or Pyrenean heights, and most of them can be readily naturalised in our gardens.

*Arenaria gothica*, although probably originally introduced into this country from Norway, has lived with us long enough to be included in our flora. In several northern localities this little rarity is found in thriving colonies, forming tiny hummocks of sharp-pointed green leaves. The flowers are produced fairly freely in June and July, being white and star-shaped on short stems. It is not at all easy to cultivate, so far I have succeeded best with it under pure scree treatment, but having heard that it grows with extra vigour on waste heaps from deserted lead mines, I am now trying it with lead cut up and mixed in the soil, but cannot yet say whether this somewhat drastic treatment will be successful.

Another choice *arenaria*, a native of Yorkshire, is *A. verna*, which is admirable for planting in combination with that other well known native, *Gentiana verna*, its rather dull green tufts of growth forming a splendid foil for the vivid blue of the gentian, and the dainty white flowers on fairy-like stems are exceedingly pretty in themselves.

Then there are all the tiny forms of the willow, every one worthy of a place in any rock garden or even alpine house. I need not describe them all, but let it suffice to say that *Salix repens*, *S. Lapponum*, *S. Myrsinites*, *S. herbacea* and *S. reticulata* are the best of them, and all creep and cling to the rock in a most charming manner.

*Gentiana verna* is almost too well known to need description, but no one sees its starry flowers of intense blue without wishing to grow and cherish it in his own garden. It thrives very happily indeed when grown in a mixture of one-third each lime-stone chip-pings, leaf-mould and sand. As a substitute for the leaf-mould, coconut fibre can be used with perfect success.

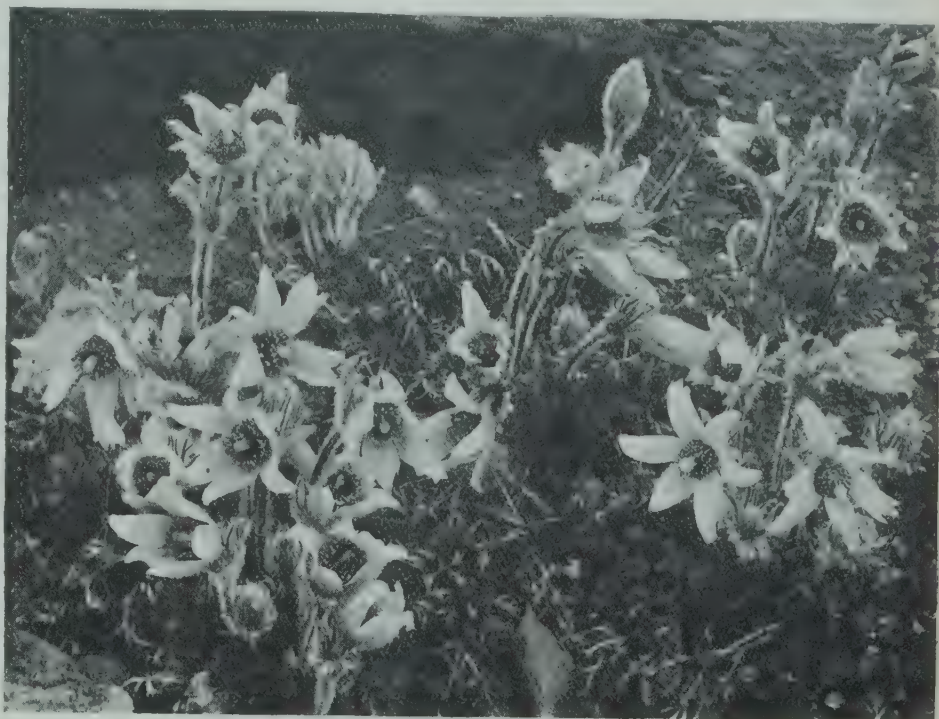
A really charming little plant is the Bird's Eye primrose (*Primula farinosa*), which grows by the million in the Yorkshire dales. In the spring when the ground is covered with a sheet of the small lilac flowers with golden eyes, on 3in. stems, it is a sight well worth seeing, and can, on a smaller scale, be easily reproduced at home, for it transplants with perfect composure into a cool, moist spot in the garden.

A much rarer primula is *P. scotica*, found only in this country along the sea coast in parts of Scotland. It is like

a much fatter and smaller edition of *P. farinosa*, with mealier stems, and considerably darker flowers. It grows only about 2ins. high and is rather apt to flower itself to death, but can be raised readily from seed.

A real little miff, which is exceedingly difficult to cultivate at all, is *Azalea procumbens*. It is a minute azalea, only 2ins. high,

and becomes a sheet of pink in the summer, when the flowers appear, but it only does this in the native state, for it seems to resent bitterly any



THE GRACEFUL PASQUE FLOWER, ANEMONE PULSATILLA.

interference with its woody rootstock, and unless small seedlings can be procured, it is hopeless to try to establish it, and even if established it seldom flowers in gardens.

A native which is very rare indeed is *Sagina Boydii*. It is a plant which, while not strikingly beautiful, still attracts one by its neat and tidy habit. Its flowers, which possess no petals at all, are quite inconspicuous and they are not missed when one sees the tight growing tussocks of glossy green leaves. The plant is quite easy to grow under scree treatment—when it can be got at all, for it is very seldom offered. I have a few small plants which are doing very well, but it is very slow to increase.

One of the most beautiful of all our plants is the pasque flower or *Anemone Pulsatilla*, which grows profusely on a few isolated hillocks in Hertfordshire. It is entirely distinct from the large Continental form so often seen in our gardens, which forms clumps a foot or more in height with huge downy flower heads; this native form rarely exceeds 4ins. or 5ins. The flowers are of the most intense deep purple, in shape like a very wide open crocus flower.

The local name for the plant is Danesblood, as it is only supposed to grow where Danish blood has been spilt. It was a sight I shall never forget when I first came upon a lonely hillside glowing with wide purple stars; seed germinates freely and it does well in cultivation.

Cornish moneywort or *Sibthorpia europæa* is a nice little thing for a shady corner among ferns; it is more interesting than beautiful, but well worthy of a place in the garden. Another plant for cool shade is *Wahlenbergia hederacea*; this is really pretty and has a fairly wide



LYCHNIS ALPINA, OF NEAT AND COMPACT HABIT.



distribution in semi-boggy positions. I have found it on the Sussex Downs growing among *Drosera rotundifolia*, our native flytrap. Flowering in early summer it produces pale blue star-shaped fairy bells, studded along a thin trailing growth of ivy-shaped leaves; the plant

has a delicate beauty all its own. A pretty biennial from Westmorland is *Lychnis alpina*. Unfortunately the flowers are of an undoubted shade of magenta, so the plant has to be placed with care. It forms bushlets of dark green leaves covered in their season with

the rosy lilac flowers; it can readily be raised from seed and is one of the easiest plants to grow.

Although the foregoing are all I have time to enumerate at present, there are many more native plants that I hope to mention in future notes.

W. INGWERSEN, JUNR.

## PLANT HOLIDAYS—II

BY H. STUART THOMPSON.

FROM S. Dalmazzo the long walk up the Val Miniera to the west is the most attractive to the alpine plant hunter. The Musk orchis and *Listera cordata* grow in mossy banks near the entrance to the valley. *Aquilegia Reuteri*, *Geranium macrorrhizum*, *Digitalis media* and *Lamium longiflorum* could not be missed, so attractive are their flowers. The rare *Phyteuma Balbisii* takes more finding, and happily is difficult to eradicate. Above the fork in the valley where the mines are, the north branch is known as Val Casterino. Still higher many ordinary alpine plants luxuriate, and the blossoms of *Nigritella* are almost invariably of a beautiful rose colour. Of primulas there are *marginata*, *latifolia*, *intricata* and *suaveolens* (the southern form of cowslip); and *Orchis speciosa* and *sambucina*, both yellow and purple, are abundant. Fortunate were the guests who ever had the privilege of staying in the summer house of the late Clarence Bicknell, which he built high up in Val Casterino. In some of the wildest regions above the valley are enormous areas of ancient rock drawings and inscriptions, which have been much written about by Bicknell and other antiquaries.

The wealth of flowers on some of those alpine slopes is beyond description. Here the ground is white with *Ranunculus pyrenæus*, numbers of the flowers being more or less double. There, interspersed with blue and white crocuses, are masses of handsome dwarf tulips (*T. australis* var. *alpestris*), whose yellow segments are deeply tinged with red. Only less abundant than the tulips are the spotted purple-brown bells of *Fritillaria Burnati*, while on an adjoining slope are thousands of the large nodding blossoms of the yellow *F. Moggridgei*, with here and there the purple species growing with it. To get to these higher slopes, collect plants and return to S. Dalmazzo in one day would be almost impossible. Night accommodation of some sort high up in the valley would be necessary. There is probably still nothing but a rough mule path up the Val Casterino. In other directions about Tenda such good saxifrages as *S. pedemontana*, *S. retusa*, *S. diapsoides*, *S. florulenta*, *S. cochlearis*, *S. lingulata* and *S. lantoscana*, can I hope still be found in greater or less profusion.

The little town of Tenda, with its crumbling castle is romantically situated two and a half miles above San Dalmazzo, but it is not so convenient a place at which to stay.

If the region is visited from the Mediterranean it can be reached either from Nice or Ventimiglia, whence the drive up the long Roya valley is shorter, and the main Tenda road is joined at Breil. This drive is full of interest. Of course any of these southern hill resorts might be combined with a visit to the famous Hanbury Gardens at Mortola.

It would be easy to take the Tenda district before a visit, via Turin and Susa, to Mont Cenis, one of the richest areas for alpine plants. But so much has been written since 1908 about Mont Cenis and its flora, that I propose to say nothing here, except that the hotel accommodation is none too good, and since the advent of motor cars it is frequently noisy, especially on Sundays.

The Col du Galibier, leading from S. Michel de Maurienne in the Arc valley and the railway near Modane to the mountains of Dauphiné and Lautaret, has a very large number of high alpine, and the district might advantageously follow a visit to Mont Cenis. But though the Lautaret pastures are renowned for the beauty and luxuriance of their flowers, and notwithstanding a nice alpine garden, the big hotel is, in the season, the rendezvous of a fashionable cosmopolitan crowd, so that I am not alone in having found quieter and less expensive quarters at one of the two hotels at La Grave, 5,000ft., a few miles down the road which leads to Grenoble. La Grave is quite a good place at which to spend a week or more, and the views thence of the Meije are very striking. Moreover, if good walkers want to do one of the easiest glacier ascents of 11,600ft. in the Alps, they can get a guide to take them up to the Col de la Lauze. The lower slopes are full of interest to the botanist. So are those of the Aiguille de Goléon. La Bérarde, with good hotel, is another desirable centre in the Dauphiny mountains.

Therefore, if opportunity occurs, it is certainly worth while to leave the train at St. Michel and walk via Valloire over the Col du Galibier,

which after the Stelvio has the highest carriage road in Europe. When I took that walk in 1907 it struck me that the large and well built village of Valloire might afford an attractive place at which to stay, and it is the prosperous looking centre of an interesting district.

Val d'Isère (6,000ft.) north of the Col d'Iseran and accessible from Mont Cenis, Lanslebourg or Modane railway station, is a delightfully situated little village, with two comfortable



THE HOME OF MANY PLANTS TO BE FOUND IN OUR ROCK GARDENS.



hotels, which I often wish circumstances had allowed me to stay at for more than one night. Alpine guides are procurable there, if wanted, for any of the longer expeditions.

Cogne, 5,000ft., in the Graian Alps, is a particularly delightful place both for flowers and big mountain expeditions. It has had its praises blown as a climbing centre and as a paradise of flowers by Mr. George Yeld, Editor of *The Alpine Journal*, and the whole district is authentically described in his "Scrambles in the Eastern Graians, 1878-1897." The valley

St. Pierre on the road to the great St. Bernard and Aosta and close to the charming Jardin de la Linnæa.

The Valley of Chamonix in Haute Savoie is comparatively disappointing botanically, and in these days Chamonix in July or August is a place to avoid. There are plenty of hotels at or above Argentière or on the Swiss frontier, which can be visited in comfort, and whence Mont Blanc and her satellites can be viewed in peace. But the Italian sides of Mont Blanc are more floristic and far less frequented, because much less



ST. MAURICE, A GATEWAY TO SEVERAL OF THE LATERAL VALLEYS OF CANTON VALAIS IN SWITZERLAND.

of Cogne is easily approached by carriage road either from Aosta or Courmayeur, and a visit to the latter resort might well be done on the same tour.

Space precludes more than mere mention of a few of the best centres for alpine plants in Switzerland. Moreover, they are known to so many. In central Switzerland perhaps Engelberg is one of the richest and most frequently visited. The limestone sub-alpine woods are remarkable for the large number of orchises, including *Cypripedium Calceolus*; but it behoves collectors to remember the increasing rarity of this European orchid. One of the best walks from Engelberg is up to the Trübsee and over the Joch Pass.

The Valais is the Swiss Canton with the richest flora, of at least 1,785 vascular plants, though the Canton du Vaud (with Ormont-dessus as a good centre) comes a good second, and Berne has about a hundred fewer species according to Jaccard. In the Valais all the valleys south of the Rhone are good, and the nearer one gets to the Italian frontier the richer the flora. I have walked up or down every one of these lateral valleys, from Binnenthal in the east to Val d'Illeiez in the west, and each possesses some special feature. But perhaps the best from our point of view are Binn, Saas, Zermatt Valley, Val d'Anniviers (Zinal, 5,500ft.), Val de Bagnes (Fionnay is a good centre), and Val d'Entremont, where the place to stay is Bourg

accessible. Courmayeur (Hôtel du Mont Blanc) is a delightful centre at just 4,000ft. So is the higher station of Breuil above Val Tournanche on the Italian side of the Matterhorn and Théodule Pass. The village of Valtournanche (5,000ft.), has several small hotels and ample first-rate guides; but I strongly recommend the higher solitary Hôtel du Mont Cervin at nearly 7,000ft. It is a large and excellent Italian hostelry, and in the midst of an immense wealth of alpine flowers.

In Canton Tessin, Piora above Airolo has of recent years become a favourite resort for lovers of the picturesque and of flowers. It was one of Canon Ellacombe's delights to go there late in life. But there are so many good centres, and already in this sketch we have exceeded our allotted space, and cannot refer to the Engadine or any district farther east.

Ball's "Alpine Guide," both old and new editions, gives numerous short lists of interesting plants for many localities. This is much the best guide to the Alps in any language, and no one in these Islands at least knew the Alps and their flora so well as John Ball. Longer lists of plants under the various districts can be found in Vol. VII of Gaudin's "Flora Helvetica," 1833. In fact the whole of that volume of 660 pages is devoted to such lists, and the places are arranged in alphabetical order.

*The photograph on this page is by permission of the Swiss Federal Railways.*



# AN EIGHTEENTH CENTURY NURSERYMAN

AT the beginning of the eighteenth century the East End of London was still an important centre for nursery gardening, although the smoke from the "sea-coal" was already beginning to interfere with the business. At Hoxton there were three large nurseries and a wine-producing vineyard that was probably the last of its kind in England. One of the nurseries was owned by John Cowell, who attracted a good deal of attention in 1729 by flowering the American aloe (*Agave americana*) and the torch-thistle (*Cereus grandiflorus*). In the same year he broadcast his success in a small booklet describing the two plants and also the Glastonbury thorn, another of his specialities. This booklet he re-issued, with much additional matter, in 1730, under the title of "The Curious and Profitable Gardiner," and a second edition of it was published in 1732 with the title changed to "The Curious Fruit and Flower Gardiner," by Richard Chandler "at the Flower-de-Luce without Temple Bar."

This last book gives an interesting picture of a phase of English gardening that is a little overshadowed for us now by the activities of the great landscape gardeners who had things so nearly their own way during the eighteenth century. The stovehouse had just been invented, after some preliminary experiments with heated walls and orange houses warmed with open fires, and now, for the first time the cultivation of tropical plants was a practical possibility.

The new fruits that were being introduced from the Colonies by the wealthy "Nabobs" interested Cowell even more than the flowers, and he gives an enthusiastic account of "The Bonana or Plaintain of Surinam; with others the most extraordinary and Admirable Fruits." The others were the pineapple, guava, mango, papaw and shaddock; and it comes with a little shock of surprise to find that these, still rare, exotic plants were grown for the sake of their fruit by private individuals at the beginning of the eighteenth century.

After describing the new fruits and their culture, the author gives a chapter to a method of naming varieties of garden plants that was in use among "the very curious Flowerists abroad." The initial letter of the name indicated the colour of the flowers; if it had two colours a double name was given and the predominating colour shown by the initial of the first word. So that a white flower marked with crimson might be called "William the Conqueror" or the "Wonder of Constantinople."

The next chapter deals with the management of the tulip, a flower that was still very popular, although the full force of the tulip mania was already past. Directions are given for inducing the flowers to break, but the author does not recommend them very strongly, seeming to incline to the view of "the learned philosophers" that variegation "proceeded from some weakness or distemper," while the methods quoted seem designed to stimulate, and the impatient are told to: "Take the Plaister of old Walls, . . . powder it fine and mix it with drift Sand, or such Sand as is sharp, and found on the Sea-shore: to this add of the Water that runs from a Dung-hill or Jakes, that one may have an equal quantity of each, . . . and put it over the surface of your bed a little before you plant your breeding or plain Tulips, and 'twill make them break into fine Stripes to a Wonder, as is related to me by a Gentleman of Great Honour, who has proved it, as he observed, for five or six Years." Another method,

"less noisome than the first," dictated a top-dressing of slaked lime and pigeons' dung in equal parts, and it seems to have been generally believed that lime favoured "breaking," for the soil in the famous garden near Brussels where tulips broke so freely was said to consist chiefly of mortar rubble.

There follows a short memorandum on growing roses. There were not yet many kinds in cultivation, for the great influx of new varieties from the Continent and the East was to come some sixty years later. Bradley, writing in 1719, says that sixteen varieties were grown by "that curious and incomparable Patroness of Botany," the Duchess of Beaufort, in her garden at Badminton, and he seems to consider it a large number, though Parkinson, perhaps making finer distinctions, had enumerated about thirty. Cowell, excluding all single and semi-double roses except the Austrian briar, gives the following fourteen as the chief sorts: the damask, the Provence ("the red and the common Sort"), the two sorts of striped roses, York and Lancaster, and Rosamundi; the white rose, the velvet rose, the carnation rose, the musk rose, the Holland's or the Belgick rose, the monthly rose, the Austrian and the double yellow.

Of this last we are told that it is "hard to blow; and some curious Gentlemen have attempted it without success, by nailing it against a wall." This is the old sulphur cabbage rose (*R. hemisphaerica*) that was introduced from Constantinople by Celsius; but even the most curious gentlemen seem to have given up the attempt to grow it in our climate. The "Monthly Rose" was probably a damask, for the China rose, that was to give rise to the monthly roses that we now know, had not yet been introduced. Rosamundi (now also known as Cottage Maid) and York and Lancaster are still grown, though one sometimes passes for the other, yet they are distinctly different as they are figured in Miss Lawrence's book of roses (1799), where Rosamundi is shown boldly striped, about equally deep pink and white, while York and Lancaster has some petals pure white and others finely pencilled with carmine; the pink and white petals are usually grouped together on either side of the flower, so that the general effect suggests the unfinished work of the gardeners in "Alice in Wonderland." The "Velvet Rose" was apparently a dark red Provence, the "Belgick Rose" a red damask, and the "Carnation Rose" (*Rosa incarnata*) a small pink.

The book ends with a description of the Glastonbury Thorn and a long account of its introduction by Joseph of Arimathea, whose staff blossomed miraculously one Christmas Day as he was preaching to the unconverted on the Isle of Avalon. The parent plant from which Cowell derived his stock was still alive at this time at Glastonbury, and was an object of pilgrimage at Christmastide, when, he says, it never failed to flower. It is still seen in a few gardens, where it is valued for its habit of flowering at intervals through the winter as well as in May, though there seems to be nothing to support its claim to an Eastern origin and the botanists find that, except for its double flowering season, it is identical with the common hawthorn.

Cowell's career seems to have ended with the flowering of the aloe, for he is referred to in 1730 as "late of Hoxton," and, although it is not clear whether he had died or only left the neighbourhood, that is the last we hear of this "excellent Florist and polite Gentleman, famous for Gardening." F. A. H.

## NOTES FROM NEW JERSEY

I CAN substantiate what Charles Leray says (December 6th, 1924, issue, page 821) of the double *Hydrangea Domotoi*. It has been listed by Henry A. Dreer for two or three years, but so far has not been taken up to any extent by the florists. When visiting the New Jersey State Experimental Station two years ago to see the results of the colour control experiments on hydrangeas, H. Domotoi was colouring up nicely and was decidedly double. I have seen no large specimens of this

variety, however. Incidentally, while hydrangeas, including some of the new hybrids, are largely grown by the florists for early spring trade, no one appears to produce the giant heads on small plants that are the rule in the London market. Here, the plants are grown with several heads, often overpotted and not notably good, except the larger specimens, 18 ins. and over across, these carrying six or more trusses. *Trophee* is fast becoming the popular dark pink, but ordinarily most growers have a

greater percentage of blues than pinks. *Trophee* shows less tendency to come blue than the older sorts. Since the New Jersey experiments proved that it is possible to control the colour, however, growers are likely to produce a greater percentage of pink shades. It is all a question of soil alkalinity and acidity; the latter means blue graduating down to pastel mauves. When pink shades are wanted lime brings about the desired results. An overdose of lime, however, causes chlorosis. Up to the present,



Chas. H. Connors, who carried out the experiments, has not issued a complete report, but when lecturing before the New York Florists' Club last year he provided sufficient data to enable growers to achieve what they desired.

The reference in the same issue to the Chinquapin, the native dwarf chestnut, prompts me to mention that the late De Van Flut made a number of crosses with the chinquapin and other species of chestnuts with a view to developing a chestnut that is proof against the blight. Throughout the northern section of the United States the large or true American chestnut, *C. dentata*, has been practically wiped out by a mysterious disease supposedly introduced from the Orient in 1904. No cure or preventive of this disease has ever been found, and only in rare instances, I believe, can specimens be found in this section. The Department of Agriculture, I believe, has a number of chinquapin hybrids, mostly crossed with the Japanese chestnut.

With reference to the question of circumventing moles, I am fain to admit

that the English mole is more easy to trap than his American cousin. The American mole does not throw heaps periodically, as does the English mole; he runs just under the surface when hunting, heaving all the time, so that it is not just a matter of burrowing beneath one's onion, sweet peas or grass patch, but the actual lifting of the surface throughout the course of operations. At no time is the lift more than 1 in. or 2 ins., but on one trip a mole can cover many yards. It is practically useless to set traps on newly made runs, as only rarely does the mole use the same track. If he does, he is too tricky to go through a trap. There are several forms of traps in use here, but they are more or less a joke. Some have formidable spikes which are supposed to spear the mole, but I never have caught one with such a trap. I have now an English trap, but all I learned about catching moles in England is useless here. I have caught one in the trap in four years. I have set it in a main run and pegged it down, but Mr. Mole goes round or beneath it.

I have tried castor beans and arsenated raisins, which western growers use with success, but of no avail, so it is now my intention to use the new calcium cyanide, which is being used in enormous quantities in the south and west for destroying moles, ground hogs, land crabs, ground squirrels, voles and similar pests. Calcium cyanide, an American discovery, does away with the use of acid as required for sodium cyanide. It is in the form of powder and has but to be poured into the runs at intervals. It is also being used for greenhouses, for while generating the deadly hydrocyanic gas, it is slower, therefore less dangerous. It has but to be sprinkled on the paths about  $\frac{1}{4}$  oz. to every 1,000 cubic feet, and the atmospheric moisture does the rest. Laid down at night, the house can be closed and left until morning, by which time the gas has dissipated, leaving nothing but free nitrogen and lime. Calcium cyanide is made by fusing sodium chloride with cyanamid, which latter is a nitrogenous fertiliser made by fusing liquid air with calcium carbide.

T. A. WESTON.

## TWO UNCOMMON PLANTS

### ERICA STRICTA.

THE Corsican heath is no rare plant in the southern parts of Italy and of Spain, but I have never seen it in the open air in the gardens of central Europe. Even in England it seems to be rarely met with. The finest plants I came across were in the garden of the late Mr. Allard at La Maulévie, near Angers, France. There I found years ago a fine collection of ericaceous plants, and among them the well flowering bushes of *E. stricta*, of which I took the accompanying photograph.

The bright pink flowers of the Corsican heath contrast well with the dark green foliage. They open rather late in summer, and for this reason the species is an even more desirable plant for the heath garden. It has rather stiff, rigid branches, and the leaves are arranged in fours. Whether there are some varieties with white or darker reddish flowers I do not know, at least there is none mentioned in the dendrological books at my disposal.

Behind the flowering plant of *E. stricta* in the picture there is a somewhat larger bush of the common tree heath that opens its fragrant flowers in spring, and it is a common feature of the landscape in the Mediterranean.

### TAXODIUM DISTICHUM.

The North American bald cypress, *Taxodium distichum*, was introduced to Europe about 1640. According to Britton, in its native home it is confined to the coastal region

from Southern Delaware to Florida, westward, near the Gulf, to Texas, and up the Mississippi Valley to Missouri and Indiana. It often forms great forests in swamps and along rivers and streams. In England as well as on the Continent the bald cypress or deciduous cypress, as it is often called, forms one of the most striking features in our parks. As its name indicates all its leaves and the small lateral shoots fall away in autumn. They form a fine feathery foliage which

is of the palest and tenderest green in May, while it becomes beautifully reddish brown and somewhat shining in October. In spring as in fall the trees attract everybody's attention, and they have, as Bean rightly remarks, nothing similar to them in the whole range of hardy trees. They develop straight trunks, tapering to the top and buttressed at the base almost like those of sequoia. Besides, except in too dry a place, *T. distichum* has the peculiarity to form the so-called knees, upright projections from the roots, which often appear in great number. An illustration was given of this tree in THE GARDEN, March 14th, page 142. After all, this interesting and hardy conifer ought to be planted wherever a suitable place can be given to it.

Besides *T. distichum*, two more species are known of the genus. One of them, *T. mucronatum*, is a native of north-eastern Mexico, and I have never met with it on the Continent. It is closely related to *distichum*. Even the third species is often regarded as only a variety of it. Its correct name is *T. adscendens*, *T. imbricarium* being a synonym. The leaves of all its twigs are closely appressed and spirally arranged, not two-ranked as in the deciduous twigs of *distichum*. A pendulous form of *adscendens* is sometimes seen in our gardens under the name of *Glyptostrobus pendulus*, but the true *glyptostrobus* is a Chinese plant often called *T. heterophyllum* and rather distinct from the American species. CAMILLO SCHNEIDER.



ERICA STRICTA WREATHED IN ITS BRIGHT PINK BLOSSOMS.



## THE SPRING ROSE SHOW

MANY members of the National Rose Society travelled quite long distances to attend the "Feast of Roses" at the Royal Horticultural Society's Hall, Westminster, on April 24th last, and, we imagine, all felt themselves amply repaid for their journeys. There might, perhaps, have been a few more blooms in the hall, but the quality was surpassingly great, and this was not confined to the exhibits of the great trade growers, who have long ranges of glass houses at their disposal; for in some instances the amateurs more than held their own in the friendly rivalry.

There was no finer collection of exhibition roses in the Show than the twelve which

bloom in the amateurs' section. The premier nurserymen's bloom, by the way, was a wonderful and deliciously fragrant Marechal Niel, shown by Mr. A. R. Goodwin.

Although it was in a class open only to growers of not more than thirty pot plants the first prize six which Mr. C. Chambers of Harrow showed were of particularly good quality.

A basket of Mrs. Amy Hammond found many admirers, and it won the first prize for Mr. G. A. Hammond; while Mr. J. N. Hart, Potters Bar, was similarly successful with a basket of mixed varieties.

The great outstanding feature of the nurserymen's section was undoubtedly the

of Godiva, American Pillar, Lady Gay and similar sorts; while below standards of Padre, Souvenir de Claudius Pernet and Golden Emblem, they had delightful dwarfs of Mme. E. Herriot, Maud, Ophelia, Golden Emblem, Mrs. Henry Bowles and Mrs. Herbert Walsh. Messrs. Chaplin Brothers were also the only exhibitors of six pillar roses.

Polyanthus roses in pots made a very pretty show. Mr. Pemberton's first prize group contained most flower, especially on Suzanne Turbat, Edith Cavell, Juliana and Jessie. Among the varieties shown by Messrs. William Cutbush and Sons we noted Salmon Queen, Chatillon Rose, Rudolph Kluis and Ellen Poulsen.



ROSE "TEMPLAR," WHICH RECEIVED A GOLD MEDAL.



"RED EXPLORER," A NEW CLIMBING POLYANTHA ROSE.

won the first prize for Mr. G. A. Hammond of Burgess Hill. Mrs. Henry Morse, Mrs. Campbell Hall, Augustus Hartmann and Mrs. Foley Hobbs, for example, were excellent. In the class for six blooms of any one variety, Mr. Hammond also won the first prize, showing well nigh perfect specimens of Mrs. Foley Hobbs, and Mr. S. F. Jackson was a good second with the same variety.

A great many amateurs tempted fortune with six blooms of exhibition roses, and here the pride of place was gained by Mr. H. Oppenheimer, Caterham Valley, who won first place largely on account of the beautiful colouring of his specimens, which included Mrs. C. Russell, Mrs. R. D. McClure and W. E. Wallace. Mr. S. F. Jackson, who had to be content with second place, no doubt felt reconciled with the silver-gilt medal which his well nigh perfect bloom of Mrs. C. Lamplough won as being the premier

magnificent group of roses so well arranged by Mr. Elisha J. Hicks, and this was of such superb quality that the judges awarded a silver-gilt medal in addition to the first prize. There were masses of bloom of all types. At the back such cluster-flowered varieties as Ellen Poulsen, Excelsa, Coral Cluster and Orleans were delightful, while high quality was provided by the vases of Marechal Niel, Chas. E. Shea, Ophelia, Los Angeles and similar varieties, placed on a lower level. A smaller group won the second prize for Mr. George Prince, and this included Lady Hillingdon, Pax, Augustus Hartmann, Souvenir de Claudius Pernet, Victoria and Charles E. Shea of high quality. Messrs. B. R. Cant and Sons and Mr. Walter Easlea also set up admirable groups of roses.

The only circular group on a floor space was exhibited by Messrs. Chaplin Brothers. On a raised centre they showed tall pillars

Exhibition roses in the trade classes were very good, and in their first-prize twenty-four Messrs. B. R. Cant and Sons showed considerable skill in colour arrangements. Their best sorts were Rev. F. Page Roberts, John Davison, Glory of Steinforth, Padre, and Margaret M. Wylie. Mr. Hicks was second, and he included Candeur Lyonnaise, Mrs. Foley Hobbs, Frau Karl Druschki and America of merit.

The class for twelve blooms of any one variety was one of the best in the Show. Mr. A. T. Goodwin was first with Marechal Niel, of perfect form and colour with most delicious fragrance, and one of his blooms won the silver-gilt medal as being the best in the trade classes. Mr. Hicks was second with Clovelly, of beautiful pink colouring; and Messrs. B. R. Cant and Sons were third with lovely Constance Cassoon.



The baskets of roses were all highly decorative. The best two were of Lady Hillingdon and Mrs. Henry Stevens, shown by Mr. Hicks; while Mr. Goodwin was second with Marechal Niel and Frau Karl Druschki, and he was first with a wonderful basket of Marechal Niel in the class for one basket, where Messrs. Alex. Dickson and Sons were second with glowing blooms of Fred. J. Harrison and a crimson seedling.

The amateurs quite held their own in point of quality, though they could not show roses in such generous quantities as the trade growers. There was nothing finer than the twelve exhibition roses which Mr. G. A. Hammond showed. His specimens of Mrs. Amy Hammond, Mrs. Foley Hobbs, Mrs. C. Hall, Mrs. Henry Morse and William Shean were superb, as also were his six blooms of Mrs. Foley Hobbs in the class for any one variety; while Mr. S. F. Jackson was a good second with the same sort; and, although Mr. Jackson came second to Mr. H. Oppenheimer with six blooms in not less than three varieties, he included, in a magnificent Mrs. C. Lamplough, the medal bloom of the amateurs' classes. Mr. Oppenheimer's collection had more colour and included W. E. Wallace, Mrs. R. D. McClure and Mrs. C. Russell.

The two groups of roses in this section were also highly creditable. Mr. Hammond, who won the first prize, had a charming basket of Ophelia surrounded by vases of Muriel Wilson, Rev. F. Page Roberts, Mrs. E. Mawley and William Shean of fine quality. Mr. H. R. Darlington was second. Although Mr. S. F. Jackson was alone, he showed fascinating vases of mixed blooms in the class for six vases. Mr. Chalmers won the first prize in the class for growers of fewer than thirty pot roses.

The decorations of roses reached a high standard of artistic merit, and it was interesting to note that, apparently simultaneously, several ladies realised the value of sprays of purple Japanese maples for associating with their roses in the dinner-table decorations. Mrs. Courtney Page, who had this foliage and a few discreet fronds of maiden-hair fern with Mme. Butterfly roses, arranged a most charming table and was deservedly first. Mrs. A. D. Ruff was second with lovely Melody roses; Mrs. Oakley Fisher, who associated maple sprays with Roselandia, was third; and Mrs. A. Robinson was fourth. In the trade class Mrs. May was first with Mme. Butterfly; Mrs. Tisdall was second with a glowing table of Richmond; and Mrs. A. R. Bide was third with Mme. Butterfly and purple maple foliage.

The bowls and vases were also most attractive. Mrs. Courtney Page, who mixed Mme. Butterfly and Ophelia, was first with a vase and second with a bowl where Mrs. Charlton was first with Mme. Butterfly. In the open class Mrs. A. R. Bide had a fine bowl of Mrs. G. Beckwith; Mrs. Tisdale was second.

A few exhibits of miscellaneous plants added interest to the show, but of more special moment to rose lovers were the "sundries," such as the well known "Abol" preparations for combating insect and fungoid pests, and their fertiliser of excellent analysis, together with the Abol syringes. Messrs. William Cooper and Nephews, Limited, also showed insecticides of tried value and made an especial feature of their White Fly Fumigant, which is said to be very successful with this destructive and annoying pest. Katakilla—the name is well descriptive of the preparation—was attractively shown by Messrs. McDougall and Robertson, who also have a special hand-sprayer for distributing it to the best effect. Their weed killer, winter wash and the McDougall Fumer are all well known aids to successful rose-growing. Nowadays all the materials and apparatus supplied by these firms are most necessary to successful rose cultivation.

## NEW ROSES.

**ANGELE PERNET.**—A vigorous Pernetiana seedling, well supplied with large shining leaves, good stems, and bearing medium-sized blooms of old gold colour flushed with peach pink. The flowers are sweetly scented and are of good shape in all stages. Certificate of merit. Shown by Messrs. G. Beckwith and Son.

**BARBARA ROBINSON.**—A useful hybrid tea variety which produces long, pointed buds of pale yellow colour which becomes creamy yellow when the flowers are fully expanded. Shown by Messrs. Alex. Dickson and Sons.

**DAME EDITH HELEN.**—This is a showy, rich pink hybrid tea rose, with well formed blooms borne on long, stout stems. The broad, substantial petals curl back prettily, making it a good variety both for exhibition and for the garden. Shown by Messrs. Alex. Dickson and Sons.

**HYPATIA.**—A vigorous bedding rose of medium size. The buds are pointed and the mature flowers are of salmon pink colour. Shown by Messrs. Bees, Limited.

**JOAN HOWARTH.**—This delicately beautiful rose has already received a certificate of merit, and, although it was larger and better than before, it did not receive the higher award. It is a fully double rose, made up of large substantial petals of deep flesh pink colour, and is recommended for the garden and for exhibition. Shown by Messrs. Bees, Limited.

**GWYNNE CARR.**—Another variety which has previously received a certificate. Although the blooms were very attractive, the foliage was not good, but we suspect this defect is not inherent in the variety and is only temporary. Shown by Messrs. Alex. Dickson and Sons.

**LADY MARGARET STEWART.**—A very vigorous hybrid tea rose which bears enormous solid flowers of good shape but rather gross appearance. In general the flowers are white, but they are tinted with yellow and with buff. They are slightly fragrant and the foliage is very good. Certificate of merit. Shown by Messrs. Alex. Dickson and Sons.

**MAUD E. GLADSTONE.**—An attractive polyantha variety nearly 2ft. high. It is free-flowering and bears large trusses of double flowers of old-fashioned shape and pretty pink colour. The buds are coloured deep coral pink. This should be a very useful variety for garden decoration. Shown by Messrs. Bees, Limited.

**ROSELANDIA.**—This valuable yellow hybrid tea rose received an award of merit at the R.H.S. meeting. Certificate of merit. Shown by Mr. Walter Stevens.

**SENSATION.**—An exceedingly sweetly scented hybrid tea rose of deep velvety maroon colour lightened at the edges of the petals by crimson. It is beautiful in the bud state and of goblet shape when mature. The stems are practically spineless and the foliage is good. Besides being a good garden rose it is recommended for forcing. Shown by Messrs. G. Beckwith and Son.

**SALTAIRE.**—Another deliciously fragrant dark rose, but, as shown, makes excessive foliage. The fully double hybrid tea blooms are of medium size and deep velvety crimson colour, which almost suggests what might be termed a deep, burnt cardinal. Certificate of merit. Shown by Messrs. Alex. Dickson and Sons.

**TEMPLAR.**—Still another dark hybrid tea rose possessing in a marked degree that precious gift of rich fragrance. Allied to this most desirable quality is rich crimson colour with a fascinating sheen of maroon in the heart of the rose. The stems are practically spineless and the neat foliage is a rich dark green. It is recommended for "garden and bedding"; the goblet-shaped blooms have not sufficiently good foliage for the exhibition

board. Gold medal. Shown by Messrs. G. Beckwith and Son.

**WHITE ENSIGN.**—This is decidedly the best new rose of its type for many years past. The perfectly shaped, medium-sized flowers are borne on long graceful stems which carry neat dark green foliage. The plants are of free branching habit and the variety is recommended for forcing purposes as well as for the garden. At a little distance the blooms appear to be pure white, but a closer inspection reveals a fascinating creamy centre. Certificate of merit. Shown by Messrs. S. McGredy and Son.

**WILLIAM BOWYER.**—Half a dozen dwarf plants, unaccompanied by the customary vase of cut blooms, were shown of this dwarf hybrid tea rose. The moderately fragrant, medium-sized blooms are of crimson-maroon colour. Shown by Messrs. Chaplin Brothers.

**RED EXPLORER.**—Presumably this fine climbing polyantha rose was shown in competition for the Cory Cup, which is not awarded until after the Autumn Show. A splendid pot plant rather over 6ft. high was shown, and this was well furnished with erect trusses of bright crimson flowers. It is said to be a sport from Edith Cavell. Shown by Messrs. Cutbush and Sons.

## SYNTHYRIS RENIFORMIS.

IT is a little surprising to find how few, even among those who are really enthusiastic rock gardeners, are well acquainted with the synthyrises, which hail from north-west America, and some of which are of real grace and charm in the rock garden. Up to the present only a few species have been described, but I do not think that any but *S. reniformis* and *S. pinnatifida* are in commerce. Of the two I have not the slightest hesitation in asserting that *S. reniformis* is far and away the better. Alike in foliage and in flower, it is more attractive, and it is quite as easy to grow. Personally, I have never cared to trouble with *S. pinnatifida*, which I have seen in several places where *S. reniformis* was also cultivated, deeming it inferior to *S. reniformis*, which I prize as one of the best of alpine, but the former gained the favour of the late Mr. Farrer to some degree, although not so highly as *S. reniformis*, as he speaks of its "dainty plumes of blue." Its leaves, as the specific name would suggest, are finely divided. The spikes are also a little taller. *S. reniformis* is worth looking at even when out of bloom, with its tufts of rounded or kidney-shaped, brownish, rather leathery, prettily scalloped leaves. Its crowning beauty is, however, in April, when it comes into bloom and gives us its 4in. to 6in. spikes of violet flowers.

It belongs to the same Natural Order as the veronicas, and one observes at once the family resemblance in the flowers, though on the spike they present, as Mr. Farrer remarks, a "furry" appearance. They are most delightful, especially to those who can appreciate the smaller gems of the rock garden. In its native habitats *S. reniformis* grows among grass near streamlets on the slopes of the mountains near the Pacific coast, but in cultivation, although it likes a cool situation, it seems happy enough in sun or shade. Still, save under exceptional conditions, it is well to adopt the native habitats as suggestive of its requirements with us, though omitting the grass, and I prefer a cool place in the rock garden for this delightful little alpine flower. There is said to be a yellow, but undesirable synthyris called *S. Bullii*, but the possession of *S. reniformis* will enable its owner to enjoy the beauty of the most fascinating member of the family.

S. ARNOTT.



# CORRESPONDENCE

## HOME HYACINTH GROWING.

SIR,—The hyacinths seen in this illustration are grown by Miss A. E. Coles of Radlett, where this lady enthusiast raises these lovely flowers for the benefit of friends and any of the general public who like to call at her beautiful dwelling to see the gems. About three hundred bulbs, growing in sixty or seventy receptacles of all sorts, fill the room with their wonderful fragrance. Miss Coles takes pride, and justifiably so, in pointing out the fact that the work is all done by herself. She places soil in the bowls, etc., just taking some ordinary garden soil or compost from an old cucumber bed, and uses small stakes from the prunings of her fruit trees to support the blooms. A few varieties that struck one with their beauty were Perle Brilliant, of porcelain blue and large-sized bells, the spikes of which, when the writer saw them, were no less than from 12ins. to 15ins., while even King of the Blues, grown for a second season, were from 6ins. to 9ins. in length. Chestnut Flower, a wonderful variety, most distinct in appearance, strong growing and

## DIGGING AND TRENCHING.

SIR,—I would crave your kindness again to refer to the above very controversial subject, and in particular to the very courteous letters of "G. H. H." and "J. H.," which appeared in the issue of *THE GARDEN* for April 18th. Firstly, my experience with soils has extended nearly the whole gamut, including such trying subjects as sandy soil overlying gravel subsoil, and also chalk soils, and I have never yet hesitated to delve right into them in order to bring the under layers up to the surface. My idea is best summed up in the words, "If a thing is worth doing, it is worth doing well," and though the gradual process suggested by "G. H. H." may appear to many a sane gardener as a good and useful compromise, where subsoil is what may be termed "bad," yet I would assure them that it would pay better in the long run to "go the whole hog," and bring up that inferior material straight away without hesitation, though it may require a modicum of moral pluck to do so. In this act you open up the packed lower layers, afford a certain amount of drainage,

however, the ground was broken right into and the soil inverted, and then we did get the results, even though we had brought the subsoil to the top. The other instance was another piece of ground in poor fettle, and again of the London clay type. This, in order to get the results from it, was trenched by hand, and one part of it was planted with cauliflowers. The result was actually astonishing, for, despite the heavy character of the ground (and we had not been able to add much material to benefit it), the broccoli thrived so immensely that many of the heads weighed up to 12lb., some going over that weight, of the prettiest, firmest curd that any grower could wish to see.

Another point that "J. H." refers to is the effect of climate on the soil. This at the best must be a question of what, for want of a better term, is generally termed luck! It is owing to the possibility of there being no extended frosty period but in lieu thereof a probability of heavy rains, that I advocate that heavy soils should not be trenched until late winter and early spring; for, by deferring to such time, the risk of the ground packing again through the beating effect of rains and percolating water is lessened by the shorter space of time intervening between trenching and planting. Naturally, whatever the climatic influences, the surface of the soil requires to be broken or fined down in preparation for sowing or planting. Here let me interpose a remark to "J. H." that his suggestion that much labour, even up to ten times that available to the average grower, is permissible to produce the exhibition vegetables from Aldenham, is very wide of the mark. Probably the secret of such success is organisation and the methods of soil preparation that I am now defending, for on our large areas of vegetable ground, which are admittedly on a bigger scale than, say, the average garden, I do not think the man power per acre would work out so much as is often employed on quite tiny patches of ground. Certainly it is not above the average, for the preliminary work, along proper lines, helps enormously in the later stages.

Just a last word or two on the matter. Even if you who read these notes only have quite a small garden, I would advocate the trenching method, better trench half the garden than only scratch the whole surface of it over. You will then get the results, though it may mean a certain amount of more strenuous labour at the start. Further, should the results not mature the first season, see if you can discover where you have failed, and repeat the process of trenching the next season undismayed, for in my opinion you are on the right road to success. Work in all the vegetable refuse material you can, and the remains of the garden rubbish fire. All this sort of thing helps, so trench! trench!! trench!!!—EDWIN BECKETT.

## ONIONS AND RATS.

SIR,—The enclosed will, I think, interest some of your readers. It is an extract from a letter received some time since from Devonshire. I understand that rats never eat onions, and, presumably, shallots. If so, why on earth do they hoard them? Perhaps someone can explain. "The following may amuse you. On or about the shortest day I planted my shallot bed. It took 66 sets (my own special sort and none left for replacements). Within a week every set had gone bar one. A month later I found two rat-holes near my garden. I dug them out—recovered the 65 sets exactly and replanted them, and now they look like giving the usual crop."—CHARLES S. ROBINSON.



A FINE COLLECTION OF HYACINTHS GROWN IN ORDINARY GARDEN SOIL.

with double bells of soft rose pink, deeper within, were thriving in large quantity, while another glorious dwarf variety that stood out against its fellows was Orange Queen, opening pink and turning to a creamy buff, and in good contrast to it was Orange Brilliant, a striking variety with orange and red tones. Some other varieties grown were Loveliness, Lady Derby, Princess Victoria, La Grandis, Electra, Distinction, Salvator and Fair Ellen.—A.

## SWEET SCENTED CYCLAMENS.

SIR,—I was much interested to read Mr. C. Turner's letter on scented cyclamens in your issue for April 18th. I think it may interest your readers to know they can procure seed of these from Messrs. Sutton and Sons, who claim they have seed of "large-flowered, sweet-scented." I fear it is the present-day desire of growers to sacrifice everything for size of blooms, hence our scentless cyclamens of to-day. I for one have sown a packet of Messrs. Sutton's seed and am growing on thirty very strong young plants of which, I feel sure, I shall much enjoy the scent next winter and spring.—E. MCCREERY.

and prepare a better root-run, and at the same time you bring under immediate control the poorer part of the soil and place it into a position where it can receive more direct attention with a view to its reformation as a bad character.

I would give two concrete examples of this method of trenching for this poor conditioned subsoil. The first case is when at Aldenham, during the distressful period of war, we placed every possible acre under vegetables for food purposes. One area so treated was a space of thirty acres exceptionally poor pasture land, covered with hummocks of grass, and an insect-infested space at best. The tussocks were rooted out, and for the first season, in order to give birds and frost their scope in ridding the soil of the company of wireworm, etc., it was only shallowly ploughed. The treatment was effective with regard to the pests, but I was not satisfied with the crops gained from the ground, even though the main part was under potatoes. Not disappointed though, for the return was good, but not such as I wished to get, for I had to break from my usual method. The second season,



# KING ALFRED, LOOK OUT!

SIR,—For a long time King Alfred has held, in my estimation, a unique place among daffodils for pots. It gave me quite a nasty jar to read, in a recent number of *The Garden and Home Builder* of New York, a note from a contributor taking exception to its colour. Frankly, I cannot understand it. But then there are people who cannot endure the smell of a rose.

I have just had another jar—a pleasant but sorrowful one. A serious rival has turned up in Goldbeater. Thanks to the generosity of my friend Guy Wilson, I have enjoyed some three or four potfuls of this newcomer. Colour after King Alfred. Shape after the never-to-be-outclassed Maximus. This constitutes its great charm. Is it to be the substantiality of King Alfred or the lightness of Maximus that is to prevail? Perhaps there is room for both. Why not?

“United yet divided, twain at once;  
So sit two kings of Brentford on one throne.”

—JOSEPH JACOB.

# ERICA VAGANS ST. KEVERNE.

SIR,—The Cornish heath, *Erica vagans*, is one of our most valuable heaths, coming in autumn when we have some real need for it. It is excellent for the heath or rock garden, and in some places is employed with excellent effect as a plant for edging beds and borders of hardy flowers, as it stands being kept in bounds by clipping when necessary, in the same way as box. There are several varieties, all of them having protruding anthers which give a distinct appearance to this capital heath. Some years ago a great acquisition was introduced to our gardens, through the devotedness of Mr. P. D. Williams to flowers. This he called *E. v. St. Keverne*, which has been Latinised into *kevernensis*, but which most of us will still prefer to call *St. Keverne*. It is of a beautiful salmon-rose and is recognised as one of the most charming of our hardy heaths. It should have a peaty soil, but will grow well in light loam, doing least satisfactorily if there is even a mere modicum of lime in the soil. It may still be planted.—S. ARNOTT, *Dumfries*.

# SKIMMIA OBLATA.

SIR,—It is remarkable so little mention has been made of this useful shrub in the pages of *THE GARDEN*, as I can conceive no other more calculated to fulfil certain necessary qualifications. In groups of three in the shrubbery, or even as a solitary specimen, this useful evergreen, with its glaucous oval leaves and short petioles, somewhat resembling the laurel, and its showy, scarlet, holly-like berries, calls forth the admiration of all who visit our gardens. Although counted among the somewhat delicate shrubs likely to succumb in a severe winter, it is quite hardy on our north-east coast; in fact, on account of its close, thick leaves it forms here a useful shrub in newly planted gardens for splitting up or breaking the wind in exposed places, thus affording shelter to others less robust. My first experience of growing it was in 1922, when I received a score of cuttings from a friend. I was informed it was a fickle thing to strike, but I found no real difficulty. The method adopted was to insert firmly the cuttings in September in a frame containing old farmyard manure from which a crop of cucumbers had just been taken and with it incorporate a barrowload of coarse sand from the beach well washed to rid it of its salt, then with free ventilation all winter except during severe frost the cuttings were rooted the following March. They were then planted gins, apart in fibrous loam without the addition of any manure whatsoever, where they have since remained, and are now ready for another move. They

will be planted behind a semi-circular seat as a protection against cold winds, and in this position will speak its purpose infinitely better than either privet or laurel, which rob the ground of so much nutriment.—E. E. P.

# ANNUALS: A FIFTY YEARS' RETROSPECT.

SIR,—What a remarkable diversion of the loveliest colour effects we can now enjoy by the use of annuals. In long borders of mixed clumps of various types from a tall background to a gradual slope of a few inches of frontal effect, or where the beds of a large flower garden are to be filled for matching effects one with the other, a discreet selection of choice annuals is now more effective than the old-time yellow and bronze *calceolarias*; silver, bronze and bicolor leaved and the old *Vesuvius* *Scarlet* *geraniums*; the various coloured *verbenas* and other old-fashioned bedding plants, all of which required much propagation and careful wintering; also the old-time *Cliveden*, blue and yellow *violas*. While it is so very interesting to think of these old-time friends, one has now to give pride of place to the very fine displays which by now are so well known and do not need re-stating.

On a long border of over 100 yds., I last year decided to arrange a display of annuals in large clumps, ranging from a background of choice sweet peas, fronted with the tall decorative dahlias and each type of single, collarette, peony and a free-flowering old-fashioned double; then the fine tall types of varied coloured *nicotianas*, the best of the *clarkias* (doubles preferred), *godetias* (single and double), *scabious* in mixed colours, tall *antirrhinums* (*Bonfire* or *coccinea*, fiery orange; *Nelrose*, lovely pink; *Golden Monarch*, a rich yellow), tall single pink and mauve *Queen* *asters*, tall *Comet* and *Ray* *asters*,

*lupins*, ten-week stocks (mixed colours), *mignonettes*, *eschscholtzia* (dark orange), the two very beautiful *chrysanthemums*, *Morning* and *Evening* *Star*, with a few patches of *Blue* *Cornflower*, *Emperor* and *Tom Thumb* *calliopsis*, and *marigold* *Legion of Honour*.

This list I arranged to give a suitable blend of colour shades, and I believe that the greatest effect and pleasurable scene was got through the very informal way of arrangement. In taking stock of it all, and knowing the great pleasure it gave to everyone concerned, one could not help thinking of the little cost of all this display, and everything prepared from the seed packet in the same season of display, compared with the costly preparation of cuttings, and their care and attention; and then seriously reflect that in fifty years' of time the evolution in the floral world is a marvel to wonder at and think of the hybridist's art in giving to the world such wondrous beauty.—V. H. LUCAS, *The Manor Gardens, Hurworth-on-Tees*.

# VERONICA FILICAULIS.

SIR,—This is a charming little plant which has been a mass of flowers on the rock garden throughout the month of April, and it is most valuable at this period of the year. Although easily grown, it does not appear to be very common, and we are indebted to Mr. Clarence Elliott for this pretty addition. He describes it as a rampant treasure for a cool corner, and it very quickly forms a small carpet or cushion of its small green leaves to be eventually covered with china blue “bird's eyes” flowers. Judging from its behaviour here at Castleford, *Chepstow*, it should grow almost anywhere, and it is growing among the stones and gradually covering a boulder, where it is more readily seen than on the ground level. It can be increased by division after the flowering season.—T. W. B.

# Abol

## Aids to a Perfect Garden

Abol Specialities are used and recommended by experts. They are always reliable, economical and safe, and are now recognised as standard horticultural requisites.

## Abol Non-poisonous Insecticide

A sure-kill for Green Fly, American Blight and other insects. Without equal as a remedy for mildew on Roses, etc. Used in the Royal Gardens.  $\frac{1}{2}$  pt. 1/4; pt. 2/2; qt. 3/4;  $\frac{1}{2}$  gall. 5/3; gall. 9/6.

## Abol Patent Syringes

Give a perfect spray which may be varied from fine to medium or coarse, as desired. Specially recommended by the National Rose Society. Last a lifetime.

No. 4 (1 x 14), 16/4; No. 5 (1 x 20), 21/-; No. 6 ( $1\frac{1}{2}$  x 20), 26/- Bend extra, 1/6

## Abol White Fly Compound

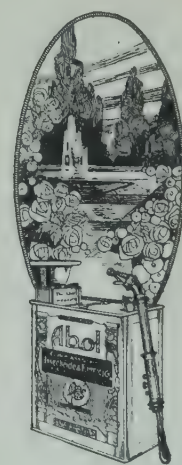
A safe remedy for White Fly on Tomatoes and Cucumbers. Economical and easy to apply. Simply pour down centre path of the house at 2 $\frac{1}{2}$  fluid ozs. to 1,000 cubic feet. From  $\frac{1}{2}$  pt. 1/- to gall. 15/- Postage extra.

## Abol Special Manures

For Roses, Sweet Peas, Chrysanthemums, Tomatoes, Potatoes, and Hop Manure; also Abol Horticultural all-round Fertilizer.

## Abol Weed Killer (Poison)

An extremely reliable and economical preparation, which entirely eradicates weeds from garden paths and walks, carriage drives, etc. In liquid and powder forms, both equally effective. Liquid:  $\frac{1}{2}$  gall. 4/-; gall. 7/6; 2 galls. 14/6. Powder: to make 12 galls. 2/-; 25 galls. 3/6; 50 galls. 6/-; 100 galls. 11/6.



Write for descriptive folder and “Guide to Garden Pests,” gratis and post free.

Sold by Nurserymen, Seedsmen, Florists, Chemists, Ironmongers and Stores.

Sole proprs. and mnfrs.

Abol Limited, 9, Beltring, Paddock Wood, Kent.



# ROYAL HORTICULTURAL SOCIETY'S Great Spring Flower Show

TO BE HELD IN THE

ROYAL HOSPITAL GARDENS, CHELSEA, LONDON, S.W.

ON

May 19th, 20th, 21st, 22nd and 23rd, 1925

The Ranelagh Gardens adjoining the Show Ground will be open to visitors and provide a resting place for those who wish to sit in the shade or to meet their friends.

*The Band of the Royal Artillery will play in these Gardens each afternoon.*

ALL FELLOWS OF THE SOCIETY ARE ADMITTED FREE ON PRESENTATION OF THEIR TICKETS.

## PRICES OF ADMISSION TO NON-FELLOWS:

Tuesday, May 19th	.. .. .	2 p.m. to 7 p.m.	.. .. .	10/-
Wednesday, May 20th	.. .. .	9 a.m. to 7 p.m.	.. .. .	5/-
Thursday, May 21st	.. .. .	9 a.m. to 7 p.m.	.. .. .	2/6
Friday, May 22nd	.. .. .	9 a.m. to 7 p.m.	.. .. .	2/6
Saturday, May 23rd (closes at 5 p.m.)	.. .. .	9 a.m. to 5 p.m.	.. .. .	1/-

## NEW REVISED EDITION.

**HANDBOOK OF THE BRITISH FLORA**

Revised and brought up to date with Additions by A. B. RENDLE, M.A., D.Sc., F.R.S., Keeper of Botany, British Museum. A description of the Flowering Plants and Ferns indigenous to or naturalised in the British Isles. By GEORGE BENTHAM, F.R.S., with additions by Sir J. D. HOOKER, C.B., G.C.S.I., F.R.S. Crown 8vo. Pp. lxi+606. Price 12s. net. Seventh Revised Edition.

**ILLUSTRATIONS OF THE BRITISH FLORA**

A series of 1321 Wood Engravings, with Dissections of British Plants, drawn by W. H. FITCH, F.L.S., with Additions by W. G. SMITH, F.L.S., and others, forming an Illustrated Companion to Bentham's "Handbook of the British Flora" and other Floras. Crown 8vo. Price 12s. net.

*Catalogue of Natural History Works sent post free on application.*

**L. REEVE & CO., LTD.,**

6, Henrietta Street, Covent Garden, LONDON, W.C.2

**HERBERT'S GOLD MEDAL PINKS**

Acknowledged to be the finest in the World. Unsurpassed for border or pot culture, of robust constitution, free flowering, unique colouring, and delightful fragrance. Received Ten Awards of Merit.

*Lists Free.*

**C. H. HERBERT, Nurseries, Hazelwood Road, Acock's Green, BIRMINGHAM**

**GEM DAHLIAS**

**COLTNESS GEM.**—Brilliant scarlet flowers produced in the greatest profusion during summer and autumn, 18 ins. high. Undoubtedly the best Dwarf Dahlia for bedding. Plants from pots, price 7/6 per dozen.

Postage and packing free.

**DUNECHT GEM.**—A counterpart of the foregoing, but with yellow flowers. Plants from pots, price 7/6 per doz.

Postage and packing free.

*Catalogue of Hardy Scotch-Grown Bedding Plants may be had post free on request.*

**AUSTIN & McASLAN**

89 to 95, Mitchell St., GLASGOW

**WALL AND WATER GARDENS.** With

chapters on rock gardens, heath gardens, and paved water gardens. By GERTRUDE Jekyll. 7th edition, revised. 17s. 6d. net; by post, 18s. 4d.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**SHRUBS** are becoming more and more

the fashion in gardening. "Shrubs for Amateurs," Mr. W. J. Bean's new book, is the best on the subject at a reasonable price. 5/- net. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.



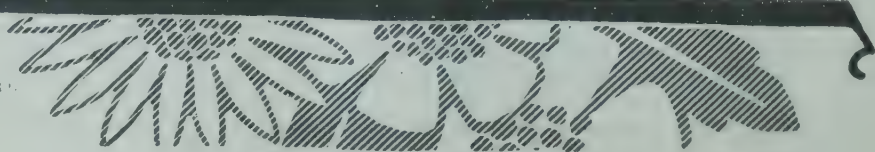
When the wily caterpillar meets Sanitas Powder he is glad of all his hundred legs to escape with. Sprinkle Sanitas on plants and soil. It keeps pests away.

Try Sanitas Powder in the new 1/3 tin, or write for bulk quotation.

*Of all chemists and stores*

SAN 230-B9

THE  
"SANITAS" CO. LTD.  
LIMEHOUSE,  
LONDON, E.





# GARDENING OF THE MONTH

## FLOWER GARDEN.

**ANNUALS AND BIENNIALS.**—Make further sowings of clarkia, iberis, lavatera, godetia, ageratum, etc. Sow thinly and cover lightly. Thin annuals sown last month. Prick off hardy annuals into reserve beds. Plant out at end of the month stocks, asters, etc., after hardening off. Sow Canterbury bells, Campanula pyramidalis, hollyhocks, myosotis, scabious, wallflowers, sweet williams, etc.

**AURICULAS AND POLYANTHUS.**—Sow outside. Lift and divide old plants after flowering. Plant out in a shady border. Water if weather is dry.

**BEDDING.**—Harden off bedding plants. Plant out the hardiest at the end of the month. Lift spring bedding when finished and prepare the beds for summer plants.

**BULBS.**—Dry off those not required for the wild garden.

**CANNAS.**—Harden off. Stand outside and expose fully to sun.

**DAHLIAS.**—Harden off. Plant out first batch at end of the month.

**HERBACEOUS BORDERS.**—Stake and tie up growths. Weed and hoe regularly. Thin growths of phlox, helenium, rudbeckia, etc. Thin out shoots of choice asters.

**HOLLYHOCKS.**—Transplant autumn sown seedlings. Plant out seedlings in frames.

**LILIUMS.**—Plant in permanent quarters *L. auratum* and *L. speciosum*, now growing in pots in frames.

**PERENNIALS.**—Continue to propagate by means of cuttings. Mulch choice perennials with short manure.

**PRIMROSES.**—Plant out in shady positions.

**ROSES.**—Stake standards. Guard against rose maggot. Syringe with "Abol," or with soft soap and tobacco solution. Tie in growths of climbers and ramblers. Feed with liquid manure at intervals.

**SWEET PEAS.**—Sow to form a succession. Pinch side growths of young plants. Tie up to stakes. Water during dry weather.

**VIOLETS.**—Hoe between the rows. Water if dry. Spray in the evenings to keep down attacks of red spider.

**WATER AND BOG GARDEN.**—Plant aquatics and waterside plants now.

**LAWNS.**—Mow, cut all edges, and roll regularly. Weed and apply worm killer. Give a dressing of a good lawn manure.

## HARDY FRUIT.

**APPLES AND PEARS.**—Examine for aphid and spray soon. Keep down American blight. If roots attacked inject carbon bisulphide into the ground 2 ft. away from the stem.

**APRICOTS.**—Thin the fruit partially, leave the remainder of the work until after stoning.

**BUDDED TREES.**—See that the young shoots are securely tied, otherwise they may be damaged by wind.

**CHERRIES.**—Syringe dessert cherries regularly with soft water to keep the foliage clean. Spray with quassia solution if attacked by aphid. Repeat the spraying two or three times until attack has abated.

**CURRENTS.**—Keep ground clean round black currants and encourage basal growths. Syringe with tobacco and soft soap solution for currant aphid.

**GOOSEBERRIES.**—Dust with hellebore powder or spray with quassia extract to keep down gooseberry sawfly. Sprinkle lime under young trees.

**GRAFTED TREES.**—Secure grafts and remove all shoots below the grafts.

**PEACHES AND NECTARINES.**—Disbud the shoots. Tie in young growths left. Pick off leaves infected with leaf blister. Spray with sulphur and soft soap if mildew present.

**PESTS.**—Spray with Bordeaux mixture trees infested with leaf-curl.

**STRAWBERRIES.**—Plant out forced strawberries. Give a dressing of artificial manure

before bedding down with straw. Use superphosphate at the rate of 2 oz. per square yard and water in. Place nets over the beds before the birds are likely to do damage.

**RASPBERRIES.**—Thin out weak canes. Give a mulching of rotted manure and several soakings of liquid manure.

**WALLFRUIT.**—Water frequently. Remove any protection, dry the blinds, etc., and store. Syringe on warm afternoons. Syringe with nicotine solution to prevent damage by insect pests.

**GENERAL.**—Thin stone fruit. Spray with arsenate of lead when the fruit has set. Water newly planted trees.

## VEGETABLES.

**ASPARAGUS.**—Keep the beds clean. Feed with liquid manure. Do not cut too heavily.

**BEANS, BROAD.**—Make a final sowing of a late kind. Pinch tops when black fly seen.

**BEANS, SCARLET RUNNERS AND FRENCH.**—Sow in drills in the open. Plant out, after hardening off, those raised in boxes.

**BEETROOT.**—Thin seedlings 6 ins. to 9 ins. apart, and make a sowing at the end of the month in showery weather.

**BROCCOLI.**—Prick out those sown in April.

**BRUSSEL SPROUTS AND CABBAGE.**—Plant out on prepared ground.

**CARDOONS.**—Sow seed now.

**CARROTS.**—Hoe. Thin seedlings. Dust with soot when foliage damp.

**CAULIFLOWERS.**—Plant out at end of the month early varieties.

**CELERY.**—Prepare more trenches if necessary and plant ridges with lettuce. Prick out late supplies. Plant during the third week the main crop supplies.

**CHICORY.**—Sow in a sheltered position.

**CUCUMBERS.**—Harden off ridge varieties sown under glass. Plant on hot bed when weather warm. Syringe foliage twice a day.

**LEEKs.**—Finish planting out before middle of month.

**LETTUCE.**—Make further sowings. Tie up heads ready for blanching. Thin seedlings. Place soot and lime round plants to keep off slugs.

**MARROWS.**—Harden off those under glass. Plant out if weather congenial. Cover with hand lights at night.

**NEW ZEALAND SPINACH.**—Plant out seedlings now in frames.

**ONIONS.**—Guard against onion fly. Dust with soot. Thin to 4 ins. to 6 ins. apart. Hoe regularly and give occasional dustings of a fertiliser.

**PARSNIPS.**—Thin out and hoe in between.

**PEAS.**—Stake, make further sowing of marrowfats. Pinch tops as they come into bloom.

**POTATOES.**—Earth up earlies.

**RADISHES.**—Make sowings of French Breakfast. Water regularly.

**TOMATOES.**—Harden off well and plant out at the end of the month against a south wall. Sow autumn fruiting tomatoes.

**TURNIPS.**—Sow in cool, shady border for late summer supplies.

## SHRUBS.

**FLOWERING SHRUBS.**—Prune forsythia, ribes, syringas, etc., after flowering.

**HOLLIES.**—Transplant now. Lift with a good ball of soil. Water when in new position.

## FLOWERS UNDER GLASS.

**AGAPANTHUS.**—Give occasional feeding with liquid manure.

**ARUMS.**—Stand outside in sheltered corner after flowering and gradually decrease supplies of water.

**AZALEAS.**—Top-dress or re-pot after flowering. Stand outside on boards in partial shade. Do not let them suffer from lack of water.

**BEGONIAS.**—Pot on tuberous rooted kinds at the end of the month, if required for inside decoration.

**CALCEOLARIAS, HERBACEOUS.**—Stake and tie, fumigate for aphid. Sow a batch in pans.

**CHRYSANTHEMUMS.**—Give final potting at end of month if sufficient roots made. Pot very firmly. Pinch points of single and bush varieties. Give preliminary stakes. Do not pinch late varieties. Stand outside on boards if weather good during fourth week.

**CINERARIAS.**—Sow in pans and place in a cold frame.

**CYCLAMEN.**—Shake out old corms and start them in a bed of leaf soil. Spray young plants daily and stand in frames.

**CYTISUS.**—Stand outside after flowering. Pot off rooted cuttings.

**LILIUMS.**—Top-dress as roots appear on the surface. Give more water as growth increases. Ventilate freely. Damp down each morning and watch for aphid. If attacked, fumigate at once.

**PELARGONIUMS.**—Stake and tie. Feed well. Pinch the points.

**PERPETUAL CARNATIONS.**—Transfer to frames and stand on bed of ashes. Stake and tie. Feed occasionally. Re-pot when necessary. Syringe to keep down red spider.

**PRIMULAS.**—Prick off into pans and place in frames for the summer.

**ROSES.**—Give dose of liquid manure and disbud.

**SALVIA PATENS AND COLEUS.**—Take cuttings, insert in sandy compost.

**SPIRÆAS.**—Plant out after forcing in a shady position.

**GENERAL.**—Pot on all young stock as soon as sufficient root made. Ventilate well. Shade if sun hot, damp down, attend to watering carefully. Water twice daily if temperature rises considerably.

## FRUITS AND VEGETABLES UNDER GLASS.

**APRICOTS.**—Tie down young shoots. Do not tie tightly at first. Ventilate well.

**FIGS.**—Maintain warm, dry atmosphere for figs in pots and cease syringing when fruit ripening. Water fig borders with liquid manure.

**MELONS.**—Support the fruits. Pinch, stop and tie shoots. Syringe and water carefully. Give a top-dressing when roots appear through the soil. Sow seed for late crops.

**ORCHARD HOUSE.**—Give good supplies of water and occasional doses of liquid manure. Spray with nicotine solution to keep down aphid. Thin gradually the fruits when set. Remove weak laterals.

**PEACHES AND NECTARINES.**—Give more air, ventilate well during the day. Mulch with rotted manure after stoning. Temperature higher during stoning period. Feed as fruit swells. Use liquid manure, guano or Thomson's vine manure. Tie down loosely the new shoots.

**VINES.**—Keep temperature even. Ventilate well whenever possible. Water well. Thin grapes. Stop sub-laterals. Pollinate muscats. After thinning sprinkle border with artificial manure and give a mulch of farmyard manure.

**CUCUMBERS.**—Pinch shoots. Top-dress mounds. Syringe and damp down. Plant out some in frames and syringe daily.

**DWARF BEANS.**—Make a sowing in a cold frame.

**MARROWS.**—Pollinate the fruit. Feed when swelling.

**PEAS.**—Give doses of weak liquid manure when pods swelling. Ventilate well.

**TOMATOES.**—Pot on plants for fruiting outside. Use 6 in. pots. Remove side growths and gradually harden off. Top-dress and give a quick acting liquid fertiliser to plants in pots for fruiting in the houses.



# SIMPLE GARDENING

## GROWING ANNUALS FOR EXHIBITION.

**A**NNUALS are grown now by everybody who possesses a garden large enough to contain a few beds, or even one small border. As classes at shows are provided for the cut flowers, exhibitors are numerous, too, in some districts. There are new exhibitors every year, and the majority are not conversant with the culture and staging of the plants and flowers, respectively. Many kinds of annuals are "weedy" in habit when not well grown, and quite attractive when well cared for. It is from the latter that prize flowers are cut. I am presuming that the soil has been deeply dug or trenched, as a shallow-tilled soil is not an ideal one for the plants. It should be moderately rich, too, as weakly plants are not able to produce strong stems bearing fine flowers. Many hardy annuals are raised from seeds sown in the open border direct. Of course, slugs are troublesome and often thin out the seedlings too severely; but early thinning-out should be the rule, so that every plant has room to attain full size. Early staking, with neat stakes, is also essential. During hot spells plants in light soils should be surface dressed; timely feeding and regular watering in dry weather should not be overlooked. Remove fading flowers, stage those that are fresh, richly coloured and even in size. Always cut the stems long enough, then light arrangement is possible. The following is a selection of twelve kinds: Phlox Drummondii, Yellow Sultan, Cyanus minor, Jacobaea elegans, Clarkia elegans, Linaria reticulata, candytuft, godetia, mallow, linum, collinsia, poppy.

## FEEDING PLANTS.

Many inexperienced cultivators think that all plants require feeding, and make serious mistakes. Sickly-looking plants—those having yellow leaves—and tiny ones, looking stunted and so on, are regarded as being fit specimens for feeding. Now, all such plants, grown in pots, should be carefully examined before stimulants are applied. Food must be taken up by the roots, so if the latter are few in number or some of them are dead, it is useless to apply a stimulant; in fact, it does more harm than good. Turn out the plants and ascertain if roots are freely permeating the soil round the sides of the pots and that the drainage is good. If these conditions obtain, then food is required by such plants. We can now obtain, at reasonable prices, concentrated manures suitable for all kinds of crops. The wise course to take is to follow the instructions and err on the right side—that is, apply rather weaker doses than stronger. The principle of using a small quantity and often, in preference to big doses and seldom, is a right one. All soils should be moist when manures are applied, by rain or thorough applications by water-can. About one hour after the soil has been moistened by clear water is an ideal time for applying manures

as stimulants. Seedlings should not be treated with such stimulants. Good soil and careful watering with clear water are all they need in this way. Sickly plants should be similarly treated—nursed carefully, not fed.

## HOW TO PREPARE CELERY AND LEEK TRENCHES.

As a passer-by one sees celery and leek plants growing in many gardens, some making satisfactory progress and others doing badly. When the late summer and autumn shows come one sees, practically, the season's growth of these plants, and the same tale may be told. Both kinds of plants require high cultivation and, though the inexperienced may be aware of this, he thinks that high culture consists chiefly in making deep trenches for the plants; he grows the plants in the poor subsoil and blanches them in the top good soil. I would like to urge cultivators to grow the plants in the best soil; if trenches must be made, then be content with very shallow ones. Take out the top gins. of soil and place it on one side of the trench, and the second gins. on the opposite side. Then fork into the subsoil a liberal supply of well rotted manure, loosening and breaking up that subsoil thoroughly. The next thing to do is to return the first soil removed in making the trench and to improve it by adding wood ashes, rotted manure and bone-meal. If wood ashes are not available, use soot. Mix all ingredients with the soil. Result: the trench will be about 6ins. deep, below the normal level, and the soil will be improved for the reception of the plants if it remains so until the first part of June. In due course, the second layer

of soil removed will be available for earthing-up and blanching purposes.

## TUBEROUS BEGONIAS.

I strongly recommend these plants for the greenhouse and the garden during the summer months; they are very charming and economical plants to grow. In both dry and wet seasons the foliage remains fresh and the flowers numerous and brightly coloured. The colours in mixed beds do not offend the eye as those of some other kinds of plants do. Owners of small gardens may soon obtain a supply sufficient for their needs by writing to firms who grow fine batches of plants and advertise them in *THE GARDEN*. Whether they do this or raise their own stocks, the borders should be prepared by deep digging and adding to the original soil some fibrous loam and a small quantity of half-rotted leaf-soil; not any peat.

It is very important that the growth be short-jointed and sturdy, then there will be few losses through strong winds breaking off stems. With regard to plants for greenhouse and conservatory, all such may be successfully grown without the aid of fire heat; and, provided sufficient ventilation be the rule, shading is quite unnecessary save in the case of a greenhouse in a very hot corner.

GEORGE GARNER.

## ANSWER TO CORRESPONDENT

### Conservatory and Greenhouse (I.O.M.)

—Seed of *Lathyrus pubescens* can be obtained from Messrs. Thompson and Morgan, Ipswich, who also used to offer seeds of *L. splendens*. If unobtainable there, we should advise you to write to Messrs. Howard and Smith, Olive Street, Los Angeles, California, U.S.A.

He can only tackle them one at a time—  
but—



# VERMOL

## KILLS WORMS AND GROWS GOOD GRASS

What users say of Vermol:—

### DENHAM GOLF CLUB.

"We commenced using the five tons of VERMOL WORM DESTROYER last week and can assure you that it is absolutely satisfactory. Our experience is that it has a much quicker action than any other worm killer we have used, as the worms come to the surface as soon as the watering in is commenced, where they die immediately. We are convinced that, comparatively, it is the cheapest and best preparation on the market."

Vermol Lawn Sand  
(Weed Killer)

Vermol Grass Manure  
(for impoverished turf)

Vermol Insecticide  
(for Leather - Jackets and other soil pests)

Vermol Grass Seeds  
(Finest Mixtures for all purposes)

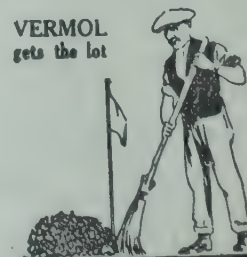
Above specialities also highly recommended.

## VERMOL PRODUCTS CO.,

### 61, St. Mary Axe, London, E.C. 3

Telephones: Avenue 1869 & 1870.

Telegrams: "Pinerous, Phone, London."





# THE GARDEN.

## EBBS' LOVELY ANNUALS—

For Sowing Out of Doors.

White Carpet Alyssum .. .. .	6d. pkt.
Express Cosmea .. .. .	8d. "
Ball of Fire Calendula .. .. .	1/- "
Annual Chrysanthemum .. .. .	8d. "
Snowflake Candytuft .. .. .	8d. "
Giant Blue Cornflower .. .. .	6d. "
Double Mixed Clarkia .. .. .	8d. "
Double Rose Godetia .. .. .	8d. "
Ensign Larkspur .. .. .	8d. "
Selected Shirley Poppy .. .. .	1/- "
Leviathan Mignonette .. .. .	1/1 "
Nigella—Miss Jekyll .. .. .	8d. "

B. AND SONS, LIMITED, THE KING'S SEEDSMEN, STOURBRIDGE.

## WATERER'S GOLD MEDAL RHODODEN-

DRONS and Azaleas, Rare Hardy Shrubs, Alpine and Perennial Plants, Vegetable and Flower Seeds, Outdoor Chrysanthemums, and Dahlias. Catalogues Free.—JOHN WATERER, S AND CRISP, LIMITED, Twyford (Berks.), Bagshot (Surrey), London.

## MAKLEY'S PATENTED HOP MANURE.

The original and only substitute for Stable Manure. See insert on back cover.

## M. DUNCAN TUCKER & SONS, LTD.,

Freemance Road, South Tottenham, N.15.—Conservatories, Water Gardens, Vineries, Peach Houses, Portable Buildings, etc.

## ROBERTS' BATHS, GARDEN VASES, SUN-

SHADES, NESTING BOXES. Catalogue (No. 4) free.—ROBERTSON, 60, Buckingham Palace Road, S.W.

## WATERS' ASPARAGUS.—Strong roots, one,

and three years old. Fruit trees, Roses, Vines and Orchard trees of first-class quality. A large stock always on view. Inspection invited. Price list post free.—THOS. RIVERS AND SONS, LIMITED, The Nurseries, Sawbridgeworth, Herts.

## GARDEN SPADES, SPECIAL, 2/6, HAND

SPADES, 1/6. Carriage Paid.—MCINTOSH, Forgue, Aber-shire.

## TANNED GARDEN NETTING, small mesh,

12 yds. by 1 yd., 2s.; 25 yds. by 2 yds., 4s.; 40 yds. by 1 yd., 3d.; 40 yds. by 2 yds., 6s. 6d.; 40 yds. by 3 yds., 9s. 9d.; Carriage paid. Compare our netting with others. Lists now ready.—GALLOP, Net Manufacturer, Hastings. Telephone: 352.

## WELLS' CATALOGUE OF CHRYSANTHE-

MUMS now ready, and will be sent post free on application.—WELLS & Co., Merstham, Surrey.

## M. ARTINDALE & SON, Nether Green

Nurseries, Sheffield, will be pleased to send their Catalogues of Hardy Plants, Seeds and Gladioli on request.

## TENNIS BOUNDARY NETTING, 50 yds. x

12 ft., 20/- Iron Standards, 9 ft., 3/- each. Tennis Nets from 1/- each. Lists now ready.—GALLOP, Net Manufacturer, Hastings.

## SWITCH RARE SEEDS. Catalogue de-

scribing nearly 3,000 kinds now ready. Free on application to J. H. SIMPSON & MORGAN, London Road, Ipswich.

## WILL OF WISE SAWS AND MODERN

PLANTS. Our catalogue offers all that is brightest and best for the present day garden. The choice plant at Sixpence a dozen may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—FEILDEN AND CROUCH, 2, Great Nurseries, Wrotham, Kent.

## ROCK PLANTS. RARE SPECIES, AND

Hybrids. List Free. Rock Garden always open for inspection.—MISS TAYLOR, Quarry Orchard, Clear, Reigate.

## NEW ZEALAND PLANTS for Seaside

Gardens.—Pittosporum nigrescens for hedges, pot grown plants for planting, now 18/- per doz. Olearia Macrodonia, 12/- doz.; splendid for hedges. Olearia Haasti, 1 ft., 12/- doz.; Brachyglottis repanda, 2/6 and 3/6 each. Muhlenbergia indivisa, 2/6 each. Ozothamnus, 2/6 each. Muhlenbergia complexa, 1/6 each.—TRESEDER & Co., The Nurseries, Rye.

## YAM.—Fibrous Yellow Turf Loam. Illus-

trated Catalogue Free.—A. B. JOHNSTON, New Park, Cranleigh, Surrey.

## BARR'S SEEDS FOR MAY SOWING, for

Vegetable and Flower Garden, Rock Garden and Greenhouse. Finest selected strains and tested growth. Special List Free.—BARR AND SONS, 11, 12 and 13, King Street, Covent Garden, London, W.C.2.

## THE DOUGLAS CLOVES AND BORDER

CARNATIONS; glorious scent, stiff stems, and continuous flowering. The new crop of seed is now ready to sow. 2s. 6d. and 5s. per packet. Plant catalogue now ready.—J. DOUGLAS (The Premier House for Carnations), Gt. Bookham.

## IRON AND WIRE FENCING FOR GAR-

DENS.—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—BOULTON AND PAUL, LIMITED, Norwich.

## SEWAGE DISPOSAL FOR COUNTRY

HOUSES.—No emptying of cesspools; a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—WILLIAM BEATTIE, 8, Lower Grosvenor Place, Westminster.

## JAMES BACKHOUSE, F.L.S., F.R.H.S., for

many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to CARR FEGLA, Arthog, North Wales.

## LAXTON'S STRAWBERRIES AND FRUIT

TREES.—We shall be exhibiting at Chelsea Show our New Strawberries for 1925, and the old ones. Large Tent, Stand No. U.—LAXTON BROTHERS, Bedford.

## ROCK PLANTS, best varieties, inexpensive,

list free.—MARION GLEDSTANES, Fardross, Clogher, Ireland.

## CHOICE NEW CHRYSANTHEMUMS.—Our

Catalogue of nearly 900 varieties, including Grand Novelty for 1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready. Post free on application.—J. W. COLE AND SON, Chrysanthemum Specialists, Peterborough.

## PRIMULA, ALPINE AND PERENNIAL,

Seeds, from large (1,500) collection, sold cheap. List free.—REV. J. F. ANDERSON, Glenn Hall, Leicester.

## GARDEN NETS.—Best tanned, small mesh,

25 yds. by 1 yd., 2/-; 25 yds. by 2 yds., 4/-; 25 yds. by 3 yds., 6/-; 25 yds. by 4 yds., 8/- Carr. Paid. Satisfaction guaranteed. Tennis nets from 10/- Special nets for tennis boundary. Pea training nets. Lists and samples free.—G. JARRETT, Net-maker, Rye.

## VANCOUVER ISLAND and Pacific Coast

rare ornamental alpine and lowland plants, bulbs, etc. Only those difficult or impossible to obtain in England are offered. Plants well packed and despatched at the right time of year arrive in good condition. Write for list.—J. BENNETT, Lake Hill P.O., Victoria, B.C., Canada.

## GENTIANA FARRERI, 2/- and 2/6;

G. acaulis, 4d.; dozen 3/6. Pompadour Primroses, 2/- each, etc. Postage extra.—WYNNE, Avoca, Ireland.

## CRAZY PAVING.—Dwarf Walling, Rockery

Stone direct from quarries. Cheapest and most artistic on market.—CLAYTON AND HAMMOND, LIMITED, 53, Baker Street, W.1.

## SUNDIALS, BIRD BATHS, VASES.—In

Imperishable Reconstructed Stone. Write for catalogue G2.—CLAYTON AND HAMMOND, LIMITED, 53, Baker Street, W.1.

## LOOK! TANNED GARDEN NETS.—All

orders despatched same day. 25 yards by 1 yard, 2/-; 25 by 2, 4/-; 25 by 3, 6/- Odd netting for bushes, 6 lbs. for 2/6. All carriage paid. Any sizes supplied. Also Tennis Boundary Nets.—MOORE & Co., Net Works, Rye.

## FOR SALE.—Green's 24in. Pony Lawn

Mower in good working order, £10.—Apply TEMPLEHILL, WATERBECK, LOCKERBIE

## SUTTON'S WALLFLOWERS.

The cultivation of the Wallflower was revolutionised when we introduced the wonderful Orange-Scarlet varieties, and we strongly recommend flower lovers to try the following:—

SUTTON'S FIRE KING (orange-scarlet).  
SUTTON'S ORANGE BEDDER (vivid orange).  
SUTTON'S CLOTH OF GOLD.  
SUTTON'S GIANT VULCAN (a fine crimson variety).

Each Per Packet, 2/6 and 1/6.

SUTTON AND SONS, THE KING'S SEEDSMEN, READING.

## BATH'S SELECT SEEDS AND PLANTS.

New Illustrated Catalogue of choice Vegetable and Flower Seeds and Plants is now ready, and will be sent post free on application.—(Dept. E), R. H. BATH, LTD., Floral Farms, Wisbech.

## DOBBIE'S 1925 CATALOGUE AND GUIDE,

136 pages, 194 illustrations. Free to all readers. Please mention THE GARDEN when writing.—DOBBIE & Co., LTD., Edinburgh.

## CHEAP GOVERNMENT WIRE!!! Great

for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760 yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—GREEN'S GOVERNMENT STORES, 69, Albert Street, Lytham.

## HERRING NETS for protecting seeds, fruit,

etc., approximately 100ft. by 30ft., 11/6 each. Other nets, better quality, 21/- each. Carriage paid. Cash with order.—WM. G. GRIGOR, Earl Street, Port Gordon, Banffshire.

## HEDGING PLANTS.—

PRIVET.—Strong English-grown, bushy and well rooted: 30-36ins. .. .. . at 13/- per 100. 36-40ins. .. .. . at 15/- per 100.

QUICKTHORN.—Extra bushy:

24-30ins. .. .. . at 10/- per 100  
Carr. Pd. on 1,000 Lots.—HODSONS, Castlegate, Nottingham

## MICHAELMAS DAISIES.—Pyrethrums and

other hardy perennials. For new catalogue write to Mrs. THORNBLY, Nursted, Devizes.

## GARDEN NETTING.—Best selected, small

mesh, tanned, 25 by 4 yds., 8/-, or 8 yds., 16/- Carriage paid. Tennis Nets and Standards. List free.—STRAWBERRY NETTING Co., 5, Suffolk Terrace, Lowestoft.

## WALL AND WATER GARDENS. With

chapters on rock gardens, heath gardens, and paved water gardens. By GERTRUDE JEKYLL. 7th edition, revised. 17s. 6d. net; by post, 18s. 4d.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## THE CULTURE OF CHRYSANTHEMUMS.

By W. WELLS, 2/6 net; cloth, 3/6 net; by post 6d. extra.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## GARDEN DESIGN is best dealt with in

"Planning and Planting of Little Gardens," by G. DILLISTONE, 6/-; by post, 6/6. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## SWEET PEAS AND HOW TO EXCEL

WITH THEM. By HORACE WRIGHT, 9d. net, by post 11d. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## CAULIFLOWER PLANTS.—BEST (Autumn

sown) Plants, Early London and Walcheren, 12/6 per 1,000; prompt delivery, carriage paid; cash with order. Special quotations for large quantities, and Price List of all varieties of autumn-sown Cabbage Plants (including Brussels Sprouts, etc.), grown from our famed Select Stocks, at lowest prices, on application.—JOHN GILLIES, PRESTONPANS, LIMITED, Prestonpans, East Lothian. Largest Cabbage Plant Growers in Britain. Established over 50 years. Telegrams, "Plants, Prestonpans"; Telephone: 24, Prestonpans.

## GREENHOUSE PAINTING AND GLAZING.

—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7lb. tins., 4/- post free; 14lb. tins., 5/6, each, carriage extra, tins free.—Full particulars from W. CARSON & SONS Grove Works, Battersea, S.W.11.



# Abol The Standard Plant Wash

Abol Non-poisonous Insecticide is a sure-kill for Green and Black Fly, etc., and is unequalled as a remedy for Mildew on Roses and other plants. It imparts health and vigour to the plant, and leaves the foliage beautifully clean and fresh.

Abol is perfectly safe to use on all flowers, fruits and vegetables, and will not harm the tenderest plant; has no unpleasant odour and will not damage paintwork.

## Abol Non-poisonous Insecticide

Used in the Royal Gardens.

$\frac{1}{2}$ -pt., 1/4; pt., 2/2; qt., 3/4;  $\frac{1}{2}$ -gall., 5/3; gall., 9/6.

Write for descriptive folders to Nurserymen, Seedsmen, Florists, Ironmongers, Chemists and Stores.

In the event of any difficulty, please write direct to the Sole Proprietors and Manufacturers, Abol Limited, 9, Beltring, Paddock Wood, Kent.



Write for Guide to Garden Pests, Gratis and Post Free.

## The Syringe with the Perfect Spray

Abol Patent Syringes give a perfect mist-like spray—strong, yet so fine that it does not fall at once to the ground, but hangs in the air, and so envelops the tree or bush. The spray may be varied from fine to medium or coarse, as desired.

No. 4 (1 x 14), 16/4

No. 5 (1 x 20), 21/-

No. 6 (1½ x 20), 26/-

Bend attachment, for directing spray to undersides of leaves, not included, but extra 1/6.

# Abol

## Patent Syringes

Specially recommended by the National Rose Society.

### GOLD MEDAL FOR DAFFODILS

INTERNATIONAL SHOW HAARLEM 1925

THE WELSH BULB FIELDS, ST. ASAPH

## GLORIOUS GLADIOLI

(PLENTY OF TIME TO PLANT).

Our Special Mixture of Large-Flowered Varieties is, we believe, the finest ever offered at the price.

Per **10/-** 100

Not a second rate variety among them.

**BEGONIAS** (Gold Medal Strain)

ANY COLOUR—Single, 1/- per dozen; 3/9 per 50  
ORDERS VALUE 5/- CARRIAGE PAID.

**LONGSTAFF & SONS, F.R.H.S.**

Bulb Growers, Importers and Merchants,  
Near CHELSFIELD STATION, Kent.

## "ACME" WEED KILLER AND LAWN SAND

**Weed Killer.**—Tin to make 25gals., 3/-; for 50gals., 6/-; Postage 9d. on each; for 150 galls., 15/- carriage paid.

**Lawn Sand** for destroying weeds and moss.—28lbs., 7/-; 56lbs., 13/-; carriage paid on 1cwt., 25/- Fertilizes the grass.

Acme Chemical Co., Ltd., Tonbridge, Kent

Please mention THE GARDEN when writing.

## HARDY ORCHIDS For Present Planting. Strong Plants.

Cypripedium acaule, 3/6 ea. Cypripedium calceolus, 2/6 ea.  
Cypripedium spectabile, 3/6 & 5/- ea.  
Orchis foliosa (in pots), 2/6 ea. 24/- per doz.

T. SMITH, Daisy Hill Nursery, Newry, Co. Down

Please mention THE GARDEN when writing.

## CHELSEA FLOWER SHOW.

## STORRIE'S HARDY SCOTCH-GROWN PLANTS

are famed for their fibrous roots, but Storrie's **AQUILEGIAS, AURICULAS, COWSLIPS, POLYANTHUS, etc.**, must be seen in bloom to be enjoyed. Participate in this joy by visiting our Group of above at Chelsea Show—Tent 1, Group 44—or failing, send for Catalogue.

**STORRIE & STORRIE**  
(Of Tiny Seedling FAME) Glencarse, Perthshire.

## YARD LONG GIANT SWORD RUNNER BEAN

The Most Wonderful Runner Bean in the World, one pot enough for one person.

40—1/6, 80—2/3, 120—3/- 200—5/-

GIVEN FREE WITH ALL ORDERS—Packet of Golden Balloon Prize Winning Onion Seed. Onions grow 2-5 lbs in weight. Also packet of Spiral Brussels Sprouts Seed.

**H. GALE, King's Somborne, HANTS**

## Unique Collection of HARDY PLANTS from SCOTLAND

Primula Littoniana, "Giant Form."

P. pinnatifida. P. vincæflora.

Meconopsis integrifolia. M. Pratti.

Omphalodes Luciliae.

See our Exhibit at Chelsea, on Table "K," of these Novelties.

CATALOGUE FREE ON REQUEST.

## OLIVER & HUNTER,

Hardy Plant Specialists,

MONIAIVE, DUMFRIESSHIRE.

## GEM DAHLIAS

**COLTNESS GEM.**—Brilliant scarlet flowers produced in the greatest profusion during summer and autumn, 18 ins. high. Undoubtedly the best Dwarf Dahlia for bedding. Plants from pots, price 7/6 per dozen.

Postage and packing free.

**DUNECHT GEM.**—A counterpart of the foregoing, but with yellow flowers.

Plants from pots, price 7/6 per doz.

Postage and packing free.

Catalogue of Hardy Scotch-Grown Bedding Plants may be had post free on request.

**AUSTIN & McASLAN**

89 to 95, Mitchell St., GLASGOW

An Excellent

## BEDDING CATALOGUE

giving helpful information of the best **BEDDING PLANTS**, including **PLANTS** for **COLOUR SCHEMES, STANDARDS** and **HALF STANDARDS** for **RELIEF BEDDING**, most moderately priced, has been issued by

**THE KING'S ACRE NURSERIES, Ltd., HEREFORD**

The List is a most interesting one and will be sent **FREE ON REQUEST.**



## The Raiser of Violas

Blanche, Councillor Waters,  
John Quarton, Mauve Queen,  
Mrs. Chichester, Swan, Seagull,  
Newton Mauve, etc., etc.,  
offers these and many others at  
reasonable prices:

SEND FOR CATALOGUE  
or one of these collections:—

Collection V. 1—		
12 Plants, all different	- -	3/3
Collection V. 2—		
50 Plants in 5 varieties	- -	10/-
Collection V. 3—		
100 Plants 10 each of 10 varieties	-	18/3

All Carriage Free for Cash with Order.

**WM. SYDENHAM**

The Gayborder Nursery  
Melbourne :: DERBY

# REAMSBOTTOM & CO'S GAYGARDEN ST. BRIGID ANEMONES

NONE GENUINE WITHOUT OUR GOLD MEDAL SEAL  
Wonderfully improved in Form and Colours.

FEW FLORAL SIGHTS CAN  
COMPARE WITH A GOOD  
BED OF THEM.

## PLANT NOW.

REAMSBOTTOM & CO.'s  
LATEST IMPROVED  
"GAYGARDEN"  
GOLD MEDAL ST.  
BRIGID ANEMONES

are the finest in the world.  
NONE ARE GENUINE WITH-  
OUT OUR GOLD MEDAL SEAL

12	..	..	..	3/-
24	..	..	..	5/6
50	..	..	..	9/6
100	..	..	..	18/-
1,000	..	..	..	170/-

Full Cultural Directions sent that  
will ensure success to every Amateur



A Gay Garden Gold Medal St. Brigid Anemone Bloom

## ALSO PLANT NOW

**LUPINUS ROSEUS** (Pink Lupins). Our glorious strain  
of these hardy perennial Lupins, most lovely shades of  
pink. 2, 1/3; 6, 3/-.

**ASTER KING GEORGE (NEW)**. Extra large-flowering  
Michaelmas Daisy; huge bluish-violet blooms, 1/6.

**LUPINUS POLYPHYLLUS**. Purple and white, 4, 1/3;  
12, 3/-.

**FRAGRANT TREE LUPIN**. White. 2, 1/4; 6, 3/6.

**PHLOX EVELYN (NEW)**. Large flowers and immense  
size, richest salmon-rose shade, an exquisite novelty, 1/6.

**RANUNCULUS ACRI FL. PLENO**. Deep golden-yellow.  
Double Buttercup. 2ft. 2, 1/9.

**RANUNCULUS**, Giant French, splendid mixture of these  
favourite flowers. 18, 1/3; 100, 5/6.

**HEUCHERA SANGUINEA**, the Coral Flower, lovely spikes  
of exquisite coral flowers, excellent for cutting. Good for  
the Rockery. 2, 1/3; 12, 7/-.

**ANEMONE JAPONICA**.  
Queen Charlotte, favourite pink. 2, 1/3.  
Whirlwind, white. 2, 1/3.  
Louise, new double white, 1/3.  
Vogel (New). 1/3.

**GLADIOLI**, Mixed, glorious Autumn-flowering bulbs of  
brilliant colours. 12, 1/8; 100, 12/-.

**PAPAVER KING GEORGE** (striking novelty), bright  
scarlet, with flimbriated petals. 1/3 each.

**PAPAVER MAHONY**. Chocolate colour, rare. 1/6.

**GAILLARDIA GRANDIFLORA**. Oursplendid improved  
extra large-flowered; choicest rich yellow, with crimson  
or brown markings. 4, 1/4; 12, 3/6.

**GENTIANA ACAULIS**. The glorious Blue Gentian,  
prized wherever a hardy flower is grown. Very dwarf.  
Likes a loamy soil, with broken stones mixed through  
it. Extremely hardy. 3, 2/3; 12, 7/6.

**PINKS, EXCELSIOR**, blush with scarlet centre. A strong  
favourite, 6, 2/6; 12, 4/6.

**MIMULUS OR MONKEY FLOWER**. Superb giant-  
flowered strain, hardy free blooming plant, covered for  
months with blotched and spotted flowers, 6, 1/6; 12, 2/9;  
24, 5/-.

**BERGAMOT (MONARDA DIDYMA)**. The deliciously  
scented true fragrant Bergamot, with striking scarlet  
flowers, 2, 1/4.

**BEGONIAS**, Single Mixed. Our strain is one of the best  
in Europe. As Bedding plants no flowers can compare  
with them, as they are equally happy in sunshine or rain.  
12, 3/-; 100, 21/-.

For other varieties, also Roses, Fruit Trees, etc., please see our ILLUSTRATED CATALOGUE FREE.  
All Cash orders of 15/- value and over carriage paid or post free, packed by experienced hands. For Free Delivery,  
smaller orders, 5/-, 10/-, add respectively for Carriage or Postage, etc., 1/- and 1/9. Safe Arrival and Satisfaction  
Guaranteed.

## REAMSBOTTOM & CO.

Tower Nurseries, West Drayton, Middlesex (Also at Geashill, Ireland)

Please address to Tower Nurseries, WEST DRAYTON, and mention  
THE GARDEN when writing.

FREE MONEY SAVING BONUS  
worth of Additional Plants FREE and  
delivered carr. paid on orders over  
15/- value if you enclose this  
coupon. Quality  
superb.—  
T. G.

## CARNATIONS for Garden & Greenhouse

PERPETUAL FLOWERING  
(Greenhouse) Varieties

We carry large stocks—  
rigidly selected—of all the  
best varieties. For im-  
mediate flower we offer  
fine plants in 6" pots in  
bud Young stock, ex 3 1/2"  
pots, stopped and broken,  
to pot along, or plant,  
ready now.

All Collections are carr.  
and packing paid for cash

6 plants	6" ex 3 1/2"	
in variety	24/-	8/6
12 " "	45/-	16/-
25 " "	80/-	30/-

**ALLWOODII (Half Pink, half Carnation)**

New and delightful self colours have been introduced in  
the ever popular Allwoodii—the hardy plant which  
grows and flowers in every garden and window-box.  
The collections quoted below are exceptional value, and  
include many quite new and unique varieties.  
6 plants in variety, 6/6 12 plants in variety, 12/-  
25 plants in variety, 22/6

**HARDY PERPETUAL BORDER CARNATIONS**

Will eventually supersede the old Border type, being  
hardier, freer flowering, carrying bolder and more  
sweetly perfumed flowers. A much wider range of  
colour is now obtainable, and the following collections  
are first-class value, embracing many of the later kinds.  
All plants ex 3 1/2" pots—immediate delivery.  
6 plants in variety, 15/- 12 plants in variety, 27/6  
CATALOGUE of all CARNATIONS POST FREE ON REQUEST  
but order the above collections at once for prompt  
delivery, and exceptional value.

The leading  
Carnation Raisers  
and Specialists  
in the World.

Dept. 4, Haywards Heath, Sussex.

Please mention THE GARDEN when writing



# BENTLEY'S SPECIALITIES

## Weed Destroyers

(Liquid 1 to 80) (Powder 1 to 25)

## Daisy Killer (Lawn Sand)

## Earthworm Destroyers

(Liquid and Powder)

## Fertilisers

For Lawns, Fruits, Flowers and Vegetable

## Insecticides

For all kinds of Pests and Filth

## Fungicides

For Fungoid Growths indoors and outdoor

## Fumigants

For use under glass and in the soil.

## Garden Requisites

Of all descriptions

Complete illustrated Catalogue free on application

— MANUFACTURERS: —

**JOSEPH BENTLEY**  
Chemical Works LTD.  
Barrow-on-Humber, HULL



By Appointment.

# RANSOMES' LAWN MOWERS

"The Best in the World."

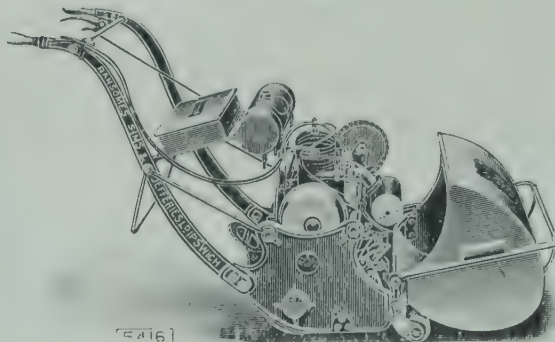


Illustration of 16in. MOTOR LAWN MOWER,  
suitable for use on medium sized gardens and  
small sports grounds.

## MOTOR MOWERS

Manufactured in Sizes up to 42in.

ALSO

HAND, HORSE, PONY AND DONKEY  
MACHINES to suit every Requirement.

PROMPT DELIVERY.

Write for List No. 111 to

**RANSOMES, SIMS & JEFFERIES**  
LTD.

ORWELL WORKS, IPSWICH.

Obtainable from all Ironmongers and Seedsman.

*Notes from Maidstone.*

—  
FOR  
PRESENT PLANTING

## ALPINE PLANTS

in little pots are now in good  
condition for planting:  
AUBRIETIAS, ROCK  
ROSES, SAXIFRAGE,  
SEDUM, ETC., ETC.

## BEDDING PLANTS.

The weather is still very cold,  
but it will soon be safe to plant  
ANTIRRHINUMS,  
DAHLIAS, FUCHSIAS,  
GERANIUMS, CHRY-  
SANTHEMUMS, ETC.,  
ETC.

## CLEMATIS

and other Climbers in pots  
are ready for sending out.

WRITE FOR OUR NEW LIST.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.

# GARDEN PLANNING

A  
R  
D  
E  
N

P  
L  
A  
N  
N  
I  
N  
G

Having resigned my appointment as Director of R. WALLACE & CO., Ltd.,  
my long association with that firm as Manager of its LANDSCAPE AND  
GARDEN DESIGN DEPARTMENT terminates on JUNE 30th.

# GEORGE DILLISTONE

## 42, Claremont Road, Tunbridge Wells.

TELEPHONE NO. 1464

By earnest and ardent devotion to the principles of GARDEN ART,  
I hope to continue my life's work as a DESIGNER OF GARDENS,  
and CONSULTANT on all matters appertaining to the Garden, and  
- - - shall welcome your enquiries. - - -

A  
R  
D  
E  
N

P  
L  
A  
N  
N  
I  
N  
G

# GARDEN PLANNING





VOL. LXXXIX.—No. 2791.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post. Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. Entered as Second-class Matter at the New York, N.Y., Post Office. Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.

MAY 16, 1925

## WHERE WILL IT END?

THE rhododendron show last week will bring home to gardeners more than anything else the plethora of species and hybrids that are now appearing on the scene. Although there are many fine hybrids which I am proud to grow, yet I have always stated my preference for species, and for this I am often considered a crank. Many species only differ in slight botanical characteristics, and so, to the ordinary gardener, may appear as closely resembling each other as do hybrids; but there is this difference, that species on their arrival into this country usually get into experienced hands and are weeded out before they reach the ordinary garden; also, most species come true from seed, with, perhaps, only slight variation of colour. The consequence is that the ordinary gardener will in time get together a collection of species; but they will be a selected list, weeded out for him by experts.

Unfortunately, this is not the case with hybrids. Owing to the fact that they are not fixed plants, a pod of a rhododendron which is in itself a hybrid, or a pod from a species which has been fertilised by another different species, will produce a collection of offspring of great variety which may lie anywhere between the parents. A number of years may elapse before their worth can be judged, and it is only natural that hybridists, who have spent infinite time and labour in growing these plants, will feel chary about discarding any except the obvious ugly ducklings; but the weeding out process is not nearly thorough enough, and many new hybrids appear under names which are practically the same as something else already in existence. This does not apply only to rhododendrons, for this craze for hybridising has reached into many corners of the garden.

Now, what is the object of hybridising? Either to improve on something already in existence or to supply a form which does not appear in nature. It is said, and it is certainly true, that hybrids are more vigorous than species; but is it necessary to have a more vigorous plant? Vigour often tends to coarseness of growth, and coarseness of growth leads to lack of individuality and so removes one of the greatest charms that rhododendron species possess. It is also said that hybrids are hardier than species, but this I very much doubt. Most of the rhododendron enthusiasts live in an equable climate, which is one of the reasons that they have become enthusiasts. It is only those who live in the east or the north who can really decide upon the hardiness of rhododendrons in general, and I should certainly say that hybrids, with the exception of those

with caucasicum blood, are just as liable to frosting as many species.

There are certain obvious lines upon which rhododendron hybridists can work, hybrids which will flower from July onwards, yellow rhododendrons and blue rhododendrons. So far these rhododendrons are conspicuous by their absence; in their place we get numbers of luscious-looking hybrids in good colours, which are very fine in their way; but are they any better than what we have seen before? They are certainly not hardier, nor are they better growers. If half a dozen various hybrids were placed in a row it might be possible by direct comparison to pick out the best, but the improvement noticeable is usually very slight. In my opinion, the most useful new hybrid shown at Vincent Square last week was Messrs. Van Nes' cross between Azalea Hinodegiri and A. Kämpferi. If you like those small and very free-flowering azaleas of the Hinodegiri type, with colours that sometimes may be harsh but are always brilliant, here is a distinct advance, for Hinodegiri is not hardy except in the extreme south and west, while the new hybrid apparently stands our weather perfectly. There was nothing exactly of this type before, so for those who like this type of plant the new hybrid is a decided improvement.

As I said before, these remarks do not only apply to rhododendrons. Slight improvements in varieties and hybrids are of little use to the ordinary gardener; what he wants are wider breaks and fewer of them. What is required is some central hybridisation authority where a committee would appraise the worth of a new cross after testing it alongside of its older neighbour. There are a number of useful lines on which a hybridiser can work if it is hybridisation that interests him. Let him try to evolve a soya bean that is suitable for cultivation in this country. Then, again, no one has ever used any of the many admirable rubi from China for producing a new berry, by crossing with a raspberry. Who knows what luscious morsel might not be produced?

E. H. M. C.

OUR NEXT ISSUE IS THE SPECIAL CHELSEA SHOW NUMBER, WHICH WILL BE ON SALE AT "THE GARDEN" STAND ON WEDNESDAY, MAY 20th.



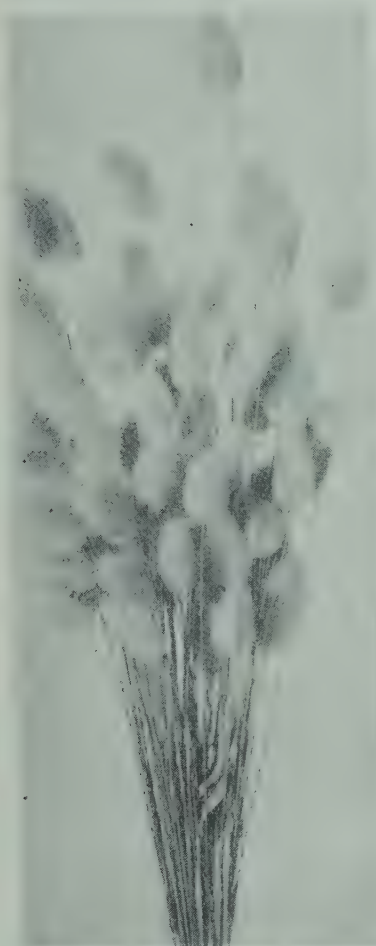
# DECORATIVE GRASSES

FOR INTERIOR DECORATION IN THE WINTER MONTHS THE GRASSES WITH THEIR CHARMING HABIT AND GRACEFUL INFLORESCENCES ARE HARD TO BEAT. A SELECTION WHICH WILL BE FOUND USEFUL IS GIVEN IN THIS ARTICLE.

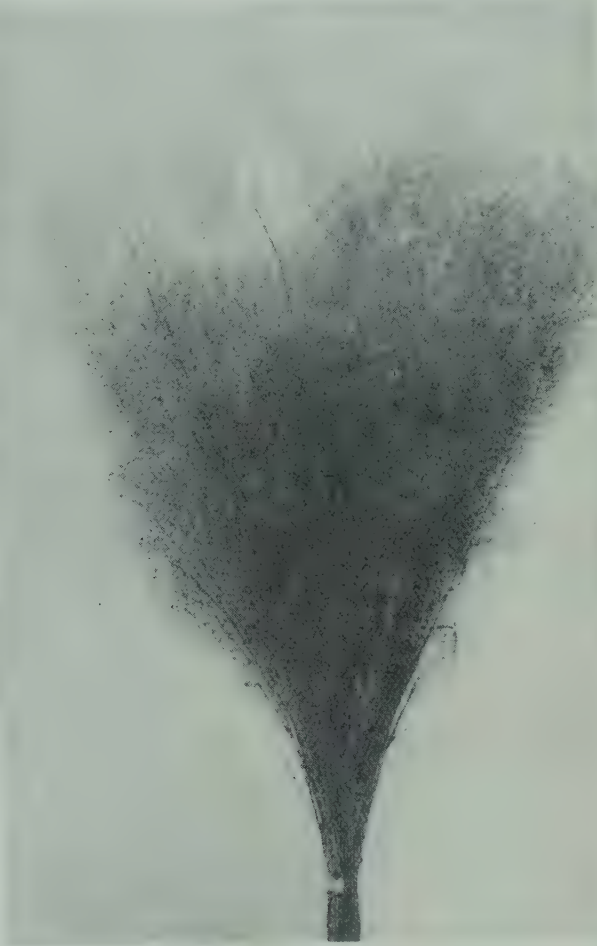
**W**INTER extends over a long period, and not everybody possesses the means of making his home gay with greenhouse or imported flowers. Ornamental grasses can, to a certain extent, serve as a substitute, especially if a good selection of them is made and a change made occasionally in the vases before heat, dust, etc., have altered the exposed inflorescences. These ornamental grasses can be grown very easily and at very little expense in every garden. All they require is moderately good ground and an open situation. The reason of their not being more generally grown rests certainly in the fact that they are usually harvested at the wrong time—that is, when the vegetation is nearly at an end and their seeds are nearly ripe. The result of this is that the inflorescences are of a washy colour and the spikelets soon drop. If everybody had the foresight to cut the stems

inflorescences are laid in a dry, airy place where they can gently come to a dry state, at what time they can be put together into small bunches that are kept away from any dust pollution till they are wanted the following winter.

Many common and native grasses are ornamental and can be used for decoration when properly harvested. But for anyone who wants to grow really showy subjects, the best thing is to adopt only commercial kinds, mostly exotics, that are offered in catalogues. These commercial grasses can be divided into two classes: the annual and the perennial ones. Probably the most important and the showiest are the annuals, perennials having the advantage, of course, of coming up year after year and of requiring less attention. A number of the latter, however, are best treated as annuals, owing to their susceptibility to winter cold and dampness.



LAGURUS OVATUS WITH SHOWY INFLORESCENCES.



THE LIGHT GRACEFUL PANICLES OF AGROSTIS NEBULOSA.



THE BROAD FLATTENED SPIKELETS OF BRACHYPODIUM DISTACHYUM.

when still in a green state, soon after flowering has taken place, the result would be infinitely better. It would, in fact, be a revelation to many who have no idea of the gracefulness and the diversity of ornamental grasses in general and of their possible uses. There can be, of course, no question of comparing these grasses with lovely fresh flowers; but during the absence of everything brilliant from the garden, from November till March, everyone becomes less exacting in his requirements, and what would have been considered an item of medium interest in the height of summer becomes then, when handy, of some value for decoration.

Although, on some occasions, it is possible to grow ornamental grasses directly in the border or in the pleasure garden (as in the case of *Tricholæna rosea* and *Paspalum elegans*, for instance), it is best, as a rule, owing to the ugly look of the plants after the stems have been cut to cultivate them in an odd corner in the kitchen or back garden. There the gardener can keep them constantly under his eye and cut the stems as soon as desirable without taking any notice of the look of the plant afterwards. As soon as harvested, the

The following species and varieties can be given as a selection among those that are most suitable:

*AGROPYRON CRISTATUM*.—Perennial; 2½ ft.; ears erect, flattish, vivid green.

*AGROSTIS NEBULOSA* (*A. CAPILLARIS*).—Annual; 1½ ft.; exceedingly light and graceful panicles.

*AIRA CÆSPITOSA VIVIPARA*.—Perennial; 3 ft.; effective if cut at an early stage.

*BRACHYPODIUM DISTACHYUM*.—Annual; 1 ft.; broad, erect, flattened spikelets. Very charming.

*BRIZA GRACILIS*, *B. MAXIMA*, *B. GENICULATA*, *B. MEDIA*.—The three first mentioned are annuals, the last perennial. These well known grasses have the most graceful aspect. *B. maxima* has the largest spikelets.

*BROMUS MACROSTACHYUS*.—Annual; 2½ ft.; erect habit. A most decorative grass.

*BROMUS PENDULINUS*.—Annual; 1½ ft.; large, flattened, drooping spikelets.

*CHLORIS BARBATA*.—Annual; 1½ ft.; digitate, highly decorative inflorescences of a very unusual type.



*CHLORIS DISTICHOPHYLLA*.—Annual and perennial; 1½ft.; very showy, but a strong lover of heat.

*COIX LACRYMA-JOBI*.—Annual; 2½ft. This is the well known "Job's Tears" plant that America is beginning to use as a forage in hot districts.

*ERAGROSTIS MAJOR* (*E. MAXIMA*).—Annual; 2ft. Probably the most showy of all *eragrostis*. Large erect panicles. Mention may also be made of *E. Fontanesi* and a few others with more slender inflorescences.

*GYNERIUM ARGENTEUM*.—Perennial; 8ft. This is the well known pampas grass, common in many gardens. Pink-flowered varieties are also very showy.

*LAGURUS OVATUS*.—Annual; 1½ft.; very showy inflorescences of most graceful and light aspect. A first-rate plant.

*LAMARKIA AUREA*.—Annual, ½ft.; a dwarf plant with yellowish, silky, pretty spikelets.

*LASIAGROSTIS CALAMAGROSTIS* (*CALAMAGROSTIS ARGENTEA*).—Perennial; 3ft.; graceful arching panicles.

*MELICA PENICILLARIS*.—Perennial; 3ft.; erect inflorescences of white, very light appearance. Other *melicas* are also beautiful: *MM. ciliata*, *nebrodensis*, *transylvanica*, etc. *Melica altissima rubra* has lovely tinted red inflorescences.

*PANICUM VIRGATUM*.—Perennial; 4ft.; light inflorescences. One of the best perennial ornamental grasses.

*PENNISSETUM VILLOSUM*.—Perennial; 2½ft.; silky heads of showy aspect. A most lovely plant. The form *atropurpureum* has nicely purplish tinted heads.

*PHALARIS CANARIENSIS*.—Annual; 3ft. This is the well known Canary grass, quite showy if harvested early.

*PHLEUM ALPINUM*.—Perennial; ¾ft.; tiny erect ears, very graceful. *Phleum Boehmeri*, of about the same type, has ears distinctly stouter and shorter.

*POLYPOGON MONSPELIENSIS*.—Annual; 1ft.; dense, erect, cylindrical inflorescences. Distinct and elegant.

*STIPA GIGANTEA*.—Perennial; 3ft.; showy, extremely light inflorescences, very long-bearded. *S. tortilis* has curiously twisted beards. *S. pennata*, silky, arching, slender panicles. All are great sun lovers.

*TRICHOLOENA ROSEA*.—Annual, 3ft.; beautiful light pinky inflorescences. A charming item either in a green or in a dry condition.

Inclusion must also be made among ornamental grasses, to be complete, of many utilitarian plants: millets of all classes, many of which have coloured and very graceful spikes or panicles and are very showy; numerous varieties of wheats, oats, barleys, ryes, etc., commonly cultivated for production, but having very decorative ears, bearded and unbearded, coloured or uncoloured, slender or stout.

The propagation of most of these grasses is easy. Sowing takes place in spring, in March and April, either in the ground the plants are to occupy, or in a nursery bed, or in boxes under a cold frame. In the two last cases it is necessary to transplant when the plants are large enough. For some species, that are natives of warm countries, such as *panicum*, *coix*, *briza*, *setaria*, *eragrostis*, etc., it is best to delay the sowing till a little later in May, when the ground has become quite warm. The only care required by these grasses during the growing period is an occasional hoeing and cleaning of the ground. C. LERAY.

## THE PALE PRIMROSE

Ring-ting! I wish I were a primrose,  
A bright yellow primrose blowing in the spring!  
The stooping boughs above me,  
The wandering bee to love me,  
The fern and moss to creep across,  
And the elm tree for our king!

—WM. ALLINGHAM.

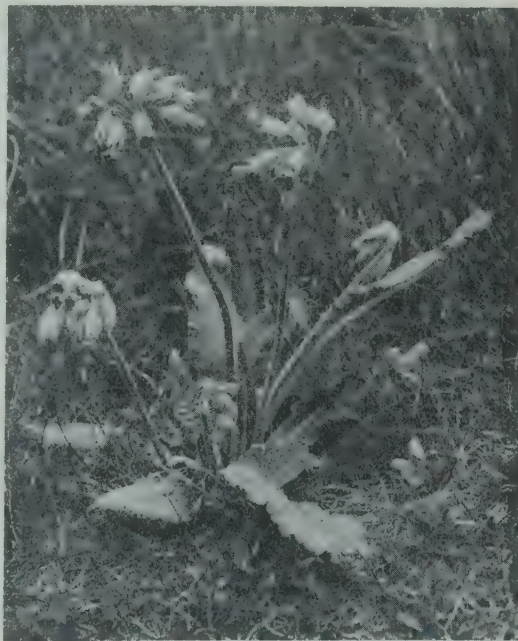
IT is something of a coincidence that the day which we call Primrose Day, April 19th, should be not only kept in memory of that great statesman, Disraeli, but the day of his death was also the day of Darwin's death a year later: "Dizzy" passing in 1881, Darwin in 1882. Darwin and Knight wrote important treatises on the primrose, and its thrum-eyed and pin-eyed, or short and long styled forms, and gave us such illuminating ideas on the subject of cross-fertilisation of plants.

In mild seasons one may find the primrose out in February, but it is undoubtedly at its best in April and May.

In its colour the primrose differs from other yellow flowers so much that the name primrose has been applied to the pale yellow of this flower. Cultivated, the primrose produces flowers of various colours from white to pink, and even bright red. Really the primrose is as much a *primula* as the garden forms of other species which always go by the name of *primula*. But *Primula acaulis* proper is always called the primrose, while its garden colour varieties are called *primulas*. Others which differ from the primrose in its usual form are known as *polyanthus*. They differ from the ordinary form of primrose in having several flowers formed on an umbel like the cowslip, but occasionally the wild primrose produces this *polyanthus* form.

Milton calls it the "rathe" or early primrose, and it is very uncertain in

its time of flowering. Those forms we have noticed with several flowers on one stalk are popularly known as oxlips. But they are not really oxlips, for the true oxlip grows only in certain counties—



THE DAINTY COWSLIP.

Essex, Cambridge, Herts and Suffolk—differing in the size and colour of the flower, and much more like a large cowslip without the spots. In the primrose there is a long, slender stalk, longer than that of the cowslip, and it rises deep down in the root-stock among the thick rosette of leaves. The stalked primrose is like a cowslip, with the flowers on a common stalk. In the primrose it is usually quite short immersed among the leaves. Occasionally the primrose and the cowslip hybridise,

some forms being more like the cowslip, some like the primrose, others quite intermediate.

Some years ago I collected one of these hybrids in Rutland in a wood in which grew the wild columbine, the mountain St. John's wort, belladonna and many other interesting flowers. Some roots were transplanted to the garden, and after increasing were divided up. One large root was divided up into twenty smaller pieces, and used as a border to a square bed. When these roots had become established they came into flower, exhibiting, in nineteen cases, the hybrid character, in this case much like the so-called "oxlips." By this I do not mean the very large cowslips—which are merely luxuriant shade or woodland varieties with flower-stalks sometimes a foot long—but the large-flowered cowslip primrose form with flowers twice as large as the cowslip and yellower than the primrose, but unspotted. The colour was intermediate, more golden than the primrose tint, but not as yellow as the cowslip flower.

One root, the twentieth, had leaves like the cowslip, which are quite unlike primrose leaves in shape, colour and the amount of wrinkling. The flower was small and exactly like a cowslip. In fact, this twentieth root was a true cowslip. It was broken off the original hybrid cowslip-primrose root. There could be no more striking proof of the hybrid origin of the original root. It showed that the hybrid had more of the cowslip in it than the primrose, though the original plant had all the flowers when gathered like the other nineteen subdivided plants, and no trace of a normal cowslip flower or leaves. In the course of growth the old plant had developed unequally,



and one portion of its original rootstock had thrown back, or had been untouched by the hybridising agent, which had affected the rest of the rootstock.

I know of no other instance of a hybrid exhibiting so clearly the hybrid origin and in the *vegetative* part or rootstock revealing one of the true untouched parents of the hybrid. The case is extremely interesting, as it shows that, apart from the reproductive factors, and the hybridising or crossing, and breeding on Mendelian lines with known results for each generation, one may have other methods of arriving at results by ordinary vegetative propagation. If a piece of a hybrid root can throw off one of the original parents, while retaining for the rest its hybrid characters, propagative methods may be developed to discover the origin of hybrids thought to be true species, and be used also to develop new forms by crossing alternatively with propagation by vegetative methods.

To revert to the forms of the primrose, "pin-eyed" and "thrum-eyed," it is not generally known that these terms owe their origin to the amateur cultivators of the auricula, a garden allied form or species, at Nottingham, who, using the terms familiar to them in the art of weaving, applied the name thrum-eyed to the form with five projecting anthers in which they saw likeness to the ends of the thrum, and so the other long-styled of pin-eyed form was so named because of the pin-like character.

Take a few primrose flowers from a grassy bank and it will soon be discovered that not all are alike. In some flowers, from the long tube a green pin-headed structure, the style, projects. Another flower will not have this, but instead in a ring round the mouth of the tube are shown five yellow points. These are the anthers. The style is short and half-way down the tube in this thrum-eyed form. Such a flower is dimorphic, or possesses two forms, a long and a short styled, and by visiting different forms an insect cross-pollinates them. The pollen in the short-styled form touches the insect at such a part of its body that it will come into contact

with a style only in the long-styled form; and conversely the short-styled form is crossed with pollen from a long-styled form, in which the anthers are half-way down the tube, and so just at the point where the style in the short-styled form is situated. Many variations

possible. It is a fallacy to argue from the particular to the general. In some cleistogamic flowers, such as the violet, later-flowering forms which follow the spring flowers, cross-pollination is precluded, for the flower is closed. Some other plants seem to be best adapted



A CLUSTER OF PALE PRIMROSES.

of crossing occur in such dimorphic forms. The pollen from a short-styled form is more prepotent or fertile when applied to the stigma of a long-styled form, than to a stigma of a short-styled form, and conversely. Cross-pollination was held to be more efficacious than self-pollination by Darwin, and his experiments and evidence bore out this view. But such a rule is not of universal application, and there is a more modern view that the opposite is the case. It is quite obvious that it is not essential nor that it is always beneficial, nor even

to self-pollination. In the dioecious plants cross-pollination becomes a fairly certain occurrence. And in wind-pollinated trees and other plants cross-pollination is the rule. Again, the example I have given shows that vegetatively plants tend to return to type in the case of hybrids or cross-pollination between different species.

We have to depend on the choice of insect visitors in a state of Nature. But a world of possibility lies before the gardener or plant breeder.

A. R. HORWOOD.

## NATURE'S ROCK GARDEN

BY HALLIWELL SUTCLIFFE.

**T**HERE is rather widespread belief that rock gardening is a whimsical affair, artificial in conception and practice.

Some such gardens, do, indeed, suggest that their creator made up his own rules as he went along, according to the day's mood or the material that came most readily to hand. But the craftsman who builds truly and for heart's delight must have learned in one school only—nature's.

And what a school! Here in our Northern heights, lean pastures climb to the sky and the grey limestone walls rake out across the lonely places. Few voices break the stillness. A shepherd's call, his dog's brief reply—the forlorn bleating of ewes, ingathered against their will—wail of a soft-flapping curlew, or drumming of the snipe—these are your only gossips, until little by little you begin to hear what seemed the silence of the rocks.

This land is little changed since the elder days. It wore the same aspect when the first beaked ships crossed Viking seas. The cave dwellers saw it much as we see it now. The Britons, who made their last stand in the North on the hill above, knew it as we know the curling slopes, the thinly-wooded heights. Mating and birth time—laughter and wooing of the men and women who ran life's gamut, and passed—the quiet rocks are their chronicle, once you have learned their speech.

An odd thought recurs to one persistently in crossing these rock-strewn acres. That last stand of the British was only the final chapter of a long and moving tale. Their ruined camps abound, and all along this savage country there were running fights and skirmishes, year in, year out. Many of these stones must be lying where they fell



after British warriors had rolled them on to the oncoming foe. There are times when the rocks are in a mood to talk of nothing but rude strife. In the silence of a brooding winter's dusk, for instance, you will see nothing, but will be aware of conflict, stark and terrible. You will hear no actual yells, no death-cries, except as it were from a long way off. But all is real. The stones are telling you Saga tales, and you cannot choose but listen.

One mighty boulder—we name him the Monarch of the Glen—is oftenest in this mood of joy in bloodthirstiness for its own sake. He stands alone among the sheep-cropped grass. Nobody knows how deep his feet go. His head and shoulders stand bulky and triumphant, though storm and frost and blistering heat have chiselled fissures, deep and wide, about his person. The story he loves best, among all his trenchant tales, is of a British Queen who slept one night in a near-by cave, and the next morning gave battle to the foe, leading her men to do or die for her. They died, to a man, and folk nowadays disturb their bones at times and hale them, without due trial, to some museum's prison.

The Monarch tells you how, when all was lost, the Queen came, heavy with wounds, and leaned against his scarred, trusty bulk. She told him how her men had fought—laughed once, for pride in them—and so went along the busy highway of the dead.

He is proud of his British Queen, of the men who fought rearward battles in the long and ever so long ago. He fought the dint of weather and hard circumstance long before their time; and still he's here, glad of life and of sheer tenacity to hold his own.

The Monarch of the Glen has his softer moments. They come when spring breathes warm across a wintry land, and plovers cry about their nesting places, and virile hope stirs the young sap in age-old thorns. The great weather gaps that seam the Monarch have gathered wind-blown leaves and held them till they rotted, mixing with the worn limestone scrapings; and vagrant seeds have strayed into these warm retreats. He is father, indeed, of a mixed brood, and from spring right on into the October days he is a garden in himself.

You would not look for the earliest primrose on these open heights, unless you chanced to know that in a cranny of the Monarch, on the west side, a strong clump has found protection from every wind that blows. No word can explain the young, eager mystery, the fresh, sufficing beauty of these blossoms, with grey rock for background.

Nor is it easy to tell of the rock rose's magic, later on when full-o'-the-year is flooding the thirsty land with heat. They have made one big pocket their own, and their roots, fibred into the porous stone, drink from an unfailing well. No drought can hinder their riot of bloom. The hotter the sun, the more they smile up at him as at a welcome friend.

The little white-flowered saxifrage has staked a claim all down the Monarch's eastern side—a joyous youngster that creeps every way, like a babe on the nursery floor. Its foliage alone is a year-long delight—green as if new-washed by rain a moment since—and its habit is to follow every dip and curve of the crannies, painting, but not hiding, the rock's bold features.

In this same area that I have in mind, not far from the Monarch, a rock garden of quite another type climbs the pasture till it steps, still upward, into a beguiling belt of low-growing trees and shrubs. Surface stones and deep-set rocks are intermingled, with the seeming carelessness that perfect art should have. All the bold effects are secured by prudence, and it is here that one learns—half consciously and by long companionship—how a man-made rock garden should rise and fall and undulate.

Every worker in this sort of craft knows that there are times when he cannot go wrong. His rocks seem to play themselves into place, as it were, with melodies; and in my own experience I have found that these inspired hours are apt to follow some prolonged excursion up to the rocky highlands. Observation has something to do with it, no doubt; but there is more—much more. One has breathed in the spirit of the rock world, and the subtle elixir is with one on returning.

The surprises of these wide-flung gardens lie in wait at every turn, and one is never sure what feast of colour is in store, or what lace-fronded clump of ferns, deep pocketed, will meet one unawares. Wild thyme, on the open slopes, throws its strong, ruddy mantle over the baked rocks. Farinosa, mealy, yet tenacious, makes pink wonderlands among the sober limestone grey. These are summer's children, but earlier in the year another quiet dweller in the rocks glows into full life.

I have seen cowslips in lush meadows, under wayside hedges, in all their usual haunts. But their grace is never so compelling as when they choose the gaunt rocks for harbourage. Their golden belfries, ringing home the bees, nowhere else, somehow, wear just this charm, and no breeze but the highland's entices the same fragrance out.

If rarer plants are your quest, you shall find Dryas, oak-leaved and pearly white of flower; and in one place, if sheer luck guided your feet there, you would happen on a free-blooming plant, housed between two crannied boulders, for which many a gardener would sell a year or two of life. It is named the Lady's Slipper; and I say advisedly, that luck alone can guide you to this special haunt. Not one of the few who know will ever give you help in the direction of their yearly pilgrimage.

Where this rock garden of the fells runs into the scanty woodland, a noise of running water tumbles down the steep, and presently you reach a stream that half pretends to be a torrent. A torrent it is in earnest now and then, after sudden melting of the snows above. Great rounded boulders guard its banks, or lie in mid-stream. And here you find a rock-garden distinct in its beauties and surprises from those left below you—a place where kingcups, in their season, stand waist deep in the stream and throw their spendthrift sheets



MR. HALLIWELL SUTCLIFFE'S ROCK GARDEN IN A YORKSHIRE DALE.

*From a painting by Ernest Moore.*

of bloom abroad—a haunt of great, wide-branched male ferns, and curled brackens, and water avens, guarded by sparse hazels and feathery rowans that lean to the cool murmurs underneath.

Where can one call a halt, in this wide travelling from one rock garden to the next? The limit of one's space is reached already, and the journey scarce begun, but any journey of this kind is worth while.



# SOME ORNAMENTAL VINES

COMMON AND UNCOMMON

**B**ROADLY speaking, "vine" is a term applicable to all plants of twining, trailing or climbing habit of growth, but it will suffice for the moment to confine our attention to such members of the genus *Vitis* as are grown for ornamental purposes.

Certain species and varieties of this remarkable genus have been long cultivated in the British Isles, but it was with the dawn of the present century that we acquired such wealth of variety, charm and beauty in introductions from China, thanks largely to the successful efforts of E. H. Wilson, George Forrest and Dr. Henry, that no one who has a particle of love for beautiful plants can differ from the opinion that in this family exist some of the grandest and loveliest of nature's rich productions.

Wherever an ornamental vine is to be planted, careful attention should be given to the rooting medium. A common observation is that vines are gross feeders, but one moment's thought as to the vast area of growth and quantity of substantial foliage an established vine produces will suffice to impress the mind with the fact that the supply of nourishment must, of necessity, be liberal. Deep digging is an absolute essential: on heavy clay soils because it improves drainage, and on light, dry soils because it facilitates descent of the roots to cool, moist areas well below the surface. Of all manure, cow's is best for light soil, being substantial and lasting, while on heavy soil strawed horse manure will be better; but some natural manure is quite necessary, supplemented perhaps, but not substituted, by artificials. Of the latter, coarse bone-meal, hoof and horn shavings, dried blood and fish meal are more serviceable to vines than sodas, sulphates and the like. If a vine is to be planted near to a tree or a coarse-growing shrub, nothing less than a cubic yard of soil should be dug out, mixing the whole with manure before returning, with an allowance of a fortnight at least for settlement before planting.

As to the season of planting, if young plants from pots are to be used (and they are by far the best) spring is the best season for the choicer and perhaps more delicate varieties, because they will have the summer and autumn during which to make root and growth before facing winter. The hardier kinds may be transplanted in autumn if so desired. A very large percentage of failures might be traced to the erroneous idea that it is an advantage to start with big strong plants. A vine in a 6in. pot with three or four runners 4ft. or more in length will have its roots wound many times round the small body of soil in the pot. It would be well if planters overcame the impatient clamouring for big strong plants and sought instead small young plants as soon as they were sufficiently developed to move with safety. Failures would be reduced to a minimum, and the supposed

loss of time would soon be realised to be imaginary rather than real.

Seldom will the purchaser of a vine which he has impressed upon the nurseryman must be a good strong plant, be persuaded to prune it before it starts to grow at all, yet that is the one time when hard pruning will be of great and permanent benefit. A plant from a pot has rods or stems which, although perhaps several feet long, are of necessity slender. It is planted, and attempts simultaneously to make new roots below ground and young growth from every joint above ground. With very small means of obtaining nourishment the large number of young shoots that break from the eyes of the slender rods are pitifully weak, and (here comes the important point) these are the shoots which should develop into the main or "trunk" branches of the vine to support and nourish all future growths. As an alternative to this let us suppose that the thin rods are cut back before sap begins to flow in early spring, leaving only two eyes at the base of each rod. The roots in the pot-ball of earth will provide sufficient nourishment to give one if not both of the retained eyes a vigorous start, and new roots forming will take up the task of drawing nourishment at a rate increasing about as rapidly as the young shoots extend, consequently maintaining unchecked a steady and strong growth. By the end of the first autumn this plant will have made three or four long, strong rods which, if evenly distributed over the widest possible area, will have laid the foundation of a thoroughly vigorous vine. The unpruned plant will only have succeeded in making a lot of thin little lateral growths which ceased development about halfway through the season, and will never be strong enough to support a big rod, probably also being too weak to withstand the rigours of a hard winter. Reverting to the plant with three or four strong rods. The proper method of pruning these during the following resting period will be to cut them back to half their length, thus encouraging the development of the lower buds, which will then break away with great vigour. Unless thus shortened, the tendency will be for the eyes at the ends (the thinnest part) of the rods to break while those of the lower and stouter half of the rods will remain dormant.

After the second year, pruning may consist chiefly of cutting away weak growths to avoid overcrowding and the removal of accidentally injured wood or of an old rod which can be replaced by a stronger young one.

Much greater benefit will accrue from careful attention at frequent intervals to little details of training than from too eager resort to surgery. There is a way of guiding and securing young growth so that even distribution is secured without the slightest evidence of the handiwork. There should not, in fact, be indication of restraint or



ONE OF THE FORMS OF FOLIAGE OF *VITIS* *HETEROPHYLLA*.



THE HANDSOME LEAF OF *V. ARMATA*.



THE GRACEFUL TRIFOLIATE LEAF OF *VITIS DELAVAYI*.



measured formality, but it is an immense mistake to imagine that the way to avoid such indications is to allow the vines to grow just as they will for the whole season through; that will result in entangled masses and many strangled growths, tendrils of one rod mercilessly gripping another and preventing normal development.

Ten minutes a day and a piece of soft twine will keep a big vine in perfect order, but neglect for a couple of months may involve a few days of laborious and not very successful effort to rectify matters.

Much depends upon supports. Tree stumps, rustic poles and treillage are not difficult problems, but walls, especially house walls, require careful consideration. Nails and shreds are intolerable and hopelessly inefficient for strong-growing vines. Staples are better, but unless very large, and consequently ugly, are likely to cause trouble when main branches swell. Diamond-meshed wire work is usually made much heavier than is necessary or desirable and, all things considered, it is difficult to beat ordinary 3in. mesh wire netting stretched taut on strained cable wires. With one early tie a young growth will thread its own way through the meshes without further aid, and if the wirework is stretched horizontally in 3ft. breadths there is no necessity to have bare netting exposed to view because a strip can be added from time to time as the extending growth of the vine requires.

Highly decorative and desirable vines are so numerous that only a small selection can be briefly described here, but these include very distinct and beautiful kinds for the most part productive of rich

autumn tints and, generally speaking, sufficiently hardy for the majority of gardens in England, Wales and Ireland.

VITIS ARMATA is very handsome, its foliage of large size, heart-shaped, with a long tapering point, conspicuously veined and closely corrugated. A full-grown leaf will sometimes measure 9ins. from stalk to tip and 7ins. across. The autumn tints are very bright, but the



THE SMALL ELEGANT LEAF OF VITIS HENRYANA, SHOWING UNDERSIDE AND VEINING.

richest and most glowing colour is attained by the variety *V. armata Veitchii*, which becomes literally blood red. *V. armata* requires ample space.

V. COIGNETIÆ.—One of the finest of the large, heart-shaped leaved vines, very closely netted over the whole surface of the leaf, the undersides being densely coated with a felt-like tomentum. Vigorous in habit and usually bright in

its autumn tints, *V. Coignetia* is more plentifully planted than many kinds.

V. HENRYANA.—Much smaller, but extremely elegant, the leaves of this species are made up of five leaflets, long-pointed, irregularly toothed and beautifully veined. The central leaflet approximates 3ins. in length, the rest being shorter. The surface of the leaf is beautifully pencilled with white lines following the course of the ribs of the leaf, and a delicate pink stain overlays some portion of the dark green of the glabrous foliage.

V. HETEROPHYLLA.—There are various forms of this vine, some having almost entire leaves, others deeply lobed and toothed. The variety *V. h. humulifolia* simulates the hop leaf, and there is a variegated form of this variety which is frequently grown in pots for conservatory decoration. It is satisfactory outdoors only when it can climb over a dark surface in a position well sheltered from cold winds, but the ivy-leaved type is quite hardy, and is very showy by reason of its shining red stems and neat foliage. *V. h. Delavayi* strikes another note, giving us a graceful trifoliate leaf, the central leaflet running to about 6ins. in length. It is broadly toothed, and hangs with a dainty elegance, the veining standing out conspicuously for so light and apparently slender a leaf.

Of VITIS FLEXUOSA several distinct varieties are now in cultivation, the type having serrated, heart-shaped leaves of small size borne on slender string-like stems. A notable feature is the length of time this vine retains its foliage, sometimes until well nigh Christmas. Good varieties are *V. f. chinensis*, *V. f. major* and *V. f. Wilsoni*. A. J. MACSELF.

## A WANDERER'S NOTE BOOK

### WILD GLADIOLUS AND CYCLAMEN.

The wild gladiolus (*G. communis* or *G. palustris*?) chronicled from Greece is also to be found round the head of Lake Garda, but probably not in any great quantity. Where I found it it was sharing with one of the small dark blue aquilegias that are so difficult to differentiate, a grassy steep slope above the road near Storo, the Austro-Italian village from which one begins the ascent of the famous Tombéa. *Cyclamen europæum*, that blooms in Greece in winter, is in countless multitude and inimitable beauty all over the lower slopes of the Monte Baldo range that flanks the eastern side of Lake Garda and of the mountains of Judicaria (in which all the European primula species seem to meet and hybridise) that stretch from the now popular resort of Gardone-Riviera to the Stelvio Pass.

### NATURAL HYBRIDS.

Are natural hybrids invariably easy of cultivation—relatively, that is—to the species that are their parents? It is a tempting generalisation and one of the curiosities of Nature. The European section of the primula family, *par excellence*, have almost elevated this rather hazardous suggestion to a general principle. The most apposite and not the least illustrious example is *P. Florekeana*, a natural hybrid of *glutinosa* and *minima*, which is to be found in the high Monzoni-thal, a "suspended" valley well off the beaten tourist track in the Italian Dolomites, which repays in very full measure the attention of the gardener, botanist and geologist. *P. minima* is by universal consent not easy of cultivation. As for *glutinosa*, it is damned by the greatest of rock garden apostles as "not impossible but . . ."—words deterrent to the many, though

doubtless an appetiser to the undaunted few, among whom Dr. Macwatt himself finds it "chary of bloom." Yet *Florekeana* is a free thriver. It is only fair to *glutinosa* to add that the same apostle bestows on it the highest praise and, apart from eulogy, *glutinosa* has the distinction of being the only truly blue primula (though in the Monzoni-thal, such has been the interference of *minima*, you are hard put to it to find many that are "truly blue"). *Salisburgensis*, again, another of the brilliant offspring of shy *glutinosa* and capricious *minima*, is admittedly a free-flowerer. The tale of the hybrid primulas is a long one and with few exceptions they are both easier and of clearer colour than the species. Memory off hand takes me to only one "ugly"—*P. discolor*, appropriately named.

### CAMPANULAS LANATA AND SPECIOSA.

*Campanula lanata* of the Balkans is described by your Greek correspondent as of a "luminous campanula blue." It was previously given in THE GARDEN as synonymous with *C. velutina*, with white, yellow or purplish flowers. I have yet to find the hill campanula to which the bald epithet "purplish" does justice. The description of the species reminds one of *C. speciosa* from the Cevennes and Pyrenees, which Farrer called a "marvel of splendour." The relation between them, if the conjecture of relationship is correct, provides another of the frequent cases in which the elder flora of the Pyrenees jumps over the Western and Central Alps to link itself with that of the Eastern Alps and Balkans, having escaped on either side the havoc of the glacial ages out of which the comparatively "young" mountains of the central chains emerged.

E. ENEVER TODD.



# A FORECAST OF THE CHELSEA SHOW

TO the lover of flowers, "Chelsea" does not mean a mere district of London, nor does it mean the famous hospital for old soldiers. It spells flowers and scents, catalogues and note-books—and, it must be confessed, crush and bewilderment. Chelsea is looked forward to with eagerness by the garden-loving public of Britain, and it draws visitors from near and far. It is the one floral show which every keen gardener, and others less keen, make a special effort to attend. This year, for five days instead of the customary three, the development and skill of the horticulturist will be demonstrated in Chelsea Hospital grounds from May 19th to May 23rd. These two extra days will enable most visitors to take full advantage of all the opportunities provided by this world-renowned exhibition.

Weather, unfortunately, plays havoc with the plans of many growers. The sun often refuses to shine just when it is most needed, and the cold, drying winds of the spring frequently do much to thwart the best-laid plans. Although it may be true that many of the flowers shown at Chelsea are grown under glass, if the weather is unkind and provides chilly and dull days it is very difficult to produce perfect specimens, and "timing," however carefully done, does not always give the wished-for results.

There is every prospect of a very fine Show this year, and the reader should make a point of seeing the exhibits mentioned below. It goes without saying that many others will be well worth attention, but space prevents reference to all when their number is great, if not legion. It must suffice, therefore, if we indicate a few of the exhibits which promise to be particularly interesting.

One of the great advantages of Chelsea is that its size permits of the construction and exhibition of rock and formal gardens of an appreciable size. There is a likelihood of some interesting rock and formal gardens being laid out this year.

Mr. George G. Whitelegg plans to use water-worn Yorkshire limestone in the construction of a rock garden, through which a mountain stream will run. In the little rocks and corners and in the cool water-sprayed crevices, choice alpine will be placed. On the more open spaces, saxifrages both new and rare and some lovely gentians will flourish. Other plants for the rock garden which Mr. G. Whitelegg can supply will be seen on his stand in one of the tents. There, choice alpine in bloom as well as the more ordinary will be exhibited in abundance. Mr. Whitelegg is showing among his collection of irises some of his new seedlings, which are bound to attract attention.

A display of those forms of *Cupressus obtusa nana*, whose neat and compact habit make them excellent backgrounds for low-growing alpine, will be made by Messrs. W. H. Rogers and Co. *Cupressus obtusa tetragona minima*, *C. obtusa cæspitosa* and *C. obtusa juniperoides*

will be included. Among these shrubs, which will be found on a tiny rock garden constructed on one of the tables, there will be patches of primulas, such as *P. helodoxa* and *P. Flambeau*, drifts of *Campanula muralis major*, and groups of *meconopsis*, *Cambrica aurantiaca plena*, *Iris gracilipes*, *Oxalis adenophylla* and many another beautiful alpine.

Judging from the reputation which is possessed by Messrs. Maxwell and Beale, and from their exhibits at other shows, both the formal garden and the inside rock garden constructed by them should be very interesting. Their plans sound most attractive. In the centre of the formal garden there will be an old West

exhibit of last year, it will demand notice.

The alpine specialist will make a point of visiting Mr. W. Wells' exhibit of gentians and choice alpine. If the weather is favourable before the Show, his collection will undoubtedly include some of the best forms.

Another exhibit which the lover of rare alpine should not miss is that of Messrs. Oliver and Hunter. They propose to show many of the hardy primulas, including such species as *P. Forrestii*, *P. pulchella*, *P. geraniifolia*, *P. pinnatifida*, *P. pseudo-capitata* and *P. Littoniana*, giant form. Among other alpine which they will exhibit are *Omphalodes Luciliae*, *Saxifraga primuloides Farrer's form*, *Armeria cæspitosa* and *Meconopsis integrifolia*.

Mr. Frederick G. Wood intends to have an inside rock garden. Alpine and shrubs in great variety will adorn the rockery. *Daphne Cneorum*, *Cytisus Beanii*, *Cistus formosa*, and some rock conifers, such as *Cupressus Fletcheri*, *Retinospora gracilis nana* and *Thuja Reingold*, are a few of the shrubs which will be there. Among the alpine will be silvery saxifrages, primulas, aquilegias, *Campanula Stevenii*, *dianthus*, *erinus* and *mimulus*.

New and uncommon shrubs will be an attractive feature on the stand of Messrs. Hillier and Sons. This firm hope to show their new *Cistus Hillieri* for the first time. Japanese maples, wisterias, bamboos and azaleas will be well represented.

Messrs. W. H. Gaze and Sons are constructing a terraced garden, in front of which will be a sunk garden. The garden will mainly show the possibilities of treatment of grounds surrounding the house. Messrs. Gaze will also show a selection of garden ornaments.

Messrs. Bakers and Co. will have an original exhibit. It will take the form of a stream garden. Visitors who are the happy possessors of a garden through which a stream runs, or those who may wish to construct an artificial one, should be able to get from this exhibit a number of ideas. There is an art in the design and construction of a stream garden; the right introduction of water will make, the wrong will mar, the whole effect.

Messrs. Cutbush and Co., who are noted for their clipped trees, polyantha roses and azaleas, will have exhibits as varied as their reputation is high. Specimens of their cut bushes will be seen. *Salmon Queen*, *Orange King* (two dwarf polyantha roses) and *Red Explorer* (the new climbing polyantha which evoked much admiration at the Spring Rose Show, will be on view. *Hydrangeas*, including such varieties as *Helge*, *Lorely*, *Maréchal Foch*, etc., will be shown inside; while it can be prophesied that among the rock gardens the space allotted to Messrs. Cutbush will be attractively filled.

Messrs. J. Carter and Co. are exhibiting a formal garden again this year, and in it there will be a fountain and pool.



DELPHINIUM MONARCH OF WALES.

Country well. The square paved paths will be edged with lavender, and the garden will be enclosed by a low wall planted with flowering alpine. A small pool surrounded by masses of spring-flowering rock plants will be found in their inside rockery.

Whether it is wet or fine during Chelsea Week, the rockery made of Westmorland stone and constructed by Messrs. R. Tucker and Sons may be examined in comfort, for it is under cover. It will be planted with alpine, shrubs and herbaceous plants. If this firm is able to equal their gold medal



Under cover of the tents they intend to show florists' flowers in plenty, cinerarias, gloxinias and begonias will be among them. Annuals will also occupy a large portion of the space allotted to this firm.

From Messrs. Barr and Sons, the firm so noted for raising first-class bulbs, one expects great things. At Chelsea, they are going to exhibit a large and varied collection of tulips, including representatives from many of the sections. In addition, they will exhibit irises, early-flowering perennials and certain alpinas.

At each fortnightly show of the R.H.S. the exhibits of Messrs. Skelton and Kirby are always noticeable; and at Chelsea they hope to exhibit a similar collection of alpinas and shrubs.

Shrubs of all kinds play an important part in the gardens of to-day. In some cases the demand is greater than the supply, and it is useful to know of a reliable firm who have a good stock of the more uncommon shrubs. Messrs. W. Fromow will be exhibiting a varied collection of Japanese maples, including such as *Acer dissectum palmatifidum*, *A. japonicum aureum*, *A. roseum marginatum*, *A. Seigenii* and *A. involutum variegatum*.

An interesting collection of rhododendrons and azaleas will be staged by the Dutch firm, Messrs. Koster and Sons.

Each year roses of all kinds are exhibited in great numbers and add to the beauties of the floral exhibits. Messrs. Frank Cant and Co. will be staging a large exhibit of many varieties, including their new seedling roses of the last three years. Among them will be Chastity, Henry Nevard, Blush Queen, Captain F. S. Harvey Cant, Prince Yugala, Snowflake and, lastly, their

new pedigree seedling rose, Rosemary, the first batches of which will be ready for distribution from June onwards. Rosemary is the beautiful hybrid tea which was awarded the 100-guinea Clay Challenge Cup for the best seedling rose introduced in 1923 with a real old rose scent.

Mr. Elisha Hicks will have almost a thousand pot roses in his group. Among them there will be all the good varieties, both old and new.

Many rambler and weeping roses will be exhibited by Messrs. A. J. and C. Allen, as well as hybrid tea, hybrid perpetual and tea roses. Havering Rambler, Papa Gouchault, Fernand Rabier, Excelsa, Orange King, the new climbing polyantha Phyllis Bide, and such well known varieties as Golden Emblem, Hadley and Betty Uprichard, will be included in this firm's collection.

A few of the varieties of roses which



ROSE SOVEREIGN, A GOOD PERNETIANA.

Messrs. B. R. Cant and Sons intend to exhibit are Rev. F. Page Roberts, Padre, Covent Garden, Casson, and three of their new pedigree seedling roses, Lady Roundway and Sovereign, both pernetianas, and Lady Dixon-Hartland, a hybrid tea.

Hosts of hardy flowers, such as delphiniums, lupines, peonies and irises, will be exhibited at Chelsea if the weather is warm enough to bring them on in time. Irises arranged in beds outside are an attractive feature at any show, and Messrs. Bunyard intend to exhibit irises in this way. A table of fruit will be exhibited by this leading fruit firm. On it late-keeping varieties of British apples and pears, such as Ontario, Wagener, Allen's Everlasting, Newton Wonder, Clark's Seedling, Sandling Duchess and the excellent variety Bramley's Seedling as well as many others will be displayed. This will surely cause many fruit growers to cast envious looks in the direction of Messrs. Bunyard's stand.

New varieties of single-flowered pyrethrums, hybrid tree lupines, herbaceous lupines, peonies—including herbaceous, double and single flowered—and new varieties of delphiniums will be staged by the well known firm of Messrs. Kelway and Sons.

Messrs. Blackmore and Langdon hope to exhibit delphiniums and double begonias. Many of the old as well as the new varieties will be included.

Another firm showing delphiniums is Messrs. Hewitt and Co., who will include



ONE OF MESSRS. GAZE'S HERBACEOUS BORDERS.



in their collection the celebrated Wrexham strain of delphiniums, Dutch irises and tulips of all kinds. Among the delphiniums will be The Bishop, Coquette, Joy Bells, Monarch of Wales, and Wembley. They are choosing such irises as Hart Nibbrig, Rembrandt, Hemskirk and J. P. Seegers to exhibit.

The multi-colours of St. Brigid anemones will form a vivid patch of colour in the beds which Messrs. Reamsbottom and Co. intend to fill with these beautiful and popular flowers.

Messrs. Stuart Low and Co. will have flowers of all kinds to display before the public. The main sections can be divided into carnations, roses, greenhouse plants and orchids. Among the fifty varieties which make up the carnation group will be Sir Philip Sassoon, Lady Hindlip, Mauve Queen and Eileen Low, all of which have been seen at the recent meetings at Vincent Square. The much talked-of rose, Roselandia, and another rose novelty, called Rosamond will be there. Acacias, ericas, boronias and many other greenhouse plants will be selected by Messrs. Stuart Low and Co. to form a large group.

Messrs. Allwood Bros. plan to stage an exceedingly large exhibit of carnations of all kinds. Some novelties which they will be showing are Shot Silk, Cameron, Butterfly and Master Michael Stoop. Jane, Anne and Roger, three Allwoodii novelties, will be exhibited.

Perpetual carnations in all shades will be staged by Messrs. Keith Luxford and Co.

Messrs. C. Engelmann, Limited, are exhibiting a large group of carnations, including a number of new unnamed seedlings. Two varieties, Red Laddie and Canada, will be worth noting.

Mr. James Douglas will be exhibiting Douglas cloves and hardy border carnations and, in another group, auriculas will be seen. These fragrant clove carnations are quite hardy, and such varieties as Salmon Clove, White Clove, Bookham Clove and Queen of the Cloves, which Mr. Douglas will show, all form well shaped flowers.

Messrs. Alex. Dickson and Sons with their famous Hawlmark sweet peas, should make a striking effect at Chelsea. They are arranging them in a novel way. At the back of the stand the flowers will cover a large trellis-work, and in front Elegance, Hawlmark Pink, Powerscourt, etc., will form bold groups of contrasting colours.

Each Chelsea Show brings forth some novelties in sweet peas, and Messrs. Dobbie and Co. hope to add several more to the ever-increasing list of varieties. In tulips, too, they have a number of surprises in store for the visitor.

Bulbous flowers, such as Darwin and late-flowering tulips, irises and gladioli have been selected by Messrs. R. H. Bath, Limited, for their exhibit.

Sunshine is what Messrs. Austin and McAslan need, or else the tulips which they hope to exhibit will not be in flower in time for the Show.

Messrs. W. H. Simpson and Sons will be exhibiting many varieties of antirrhinums.

Many species of odontoglossums, miltonias, odontonias and cypripediums will comprise the exhibit of orchids staged by Messrs. Charlesworth and Co.

Messrs. Laxton Brothers are introducing three new strawberries which will be seen on their exhibit at Chelsea. The new varieties are Empress, Vicomtesse and Laxton's Rearguard.

From Perry's Hardy Plant Farm there will be an interesting collection of new and rare ferns.

Messrs. G. Jackman will be exhibiting a large group of the leading varieties of clematis.

A great variety of lupins in all shades including many recent introductions, will be staged by Mr. G. R. Downer.

Many kinds of flowering plants raised from seed will form the exhibit of Messrs. Webb and Sons. Cinerarias, including Cineraria stellata and the cactus-flowered cineraria, calceolarias, tuberous-rooted double begonias, giant hybrid schizanthus, and countless annuals in pots, will be staged by this firm.

With good weather from now onwards, Chelsea should be a most successful and interesting Show.

## WALLFLOWERS

IN the scheme of what is generally known as spring bedding, wallflowers play an important part, and to have really fine bushy plants by the autumn the seeds ought to be sown during the month of May. The chief cause of failure with these delightful plants is late sowing, and although some may say July is sufficiently early, I maintain that fine examples cannot be obtained in the time, *viz.*, sturdy bushy plants in October or early November. Select an open site, and one that is not too rich. Sow the seeds thinly in drills 1ft. apart, and if the soil is dry afford the lines a thorough watering a few hours before sowing the seeds. Directly they are through the ground, use the hoe occasionally, then the seedlings will make headway.

Transplant early, before the young plants become drawn and leggy, and when they are about 2ins. high they should be set out in rows 1ft. apart, the same distance being allowed between the plants. Make the plants secure, and give a good watering; then, if the weather is favourable, no more will be needed.

During the summer months, keep down the weeds by frequent use of the hoe. When the plants become established, pinch out the centres to produce side shoots, and the beginner ought to bear in mind that no further pinching is needed. Wallflowers deserve an open situation during their growing period.

With the arrival of autumn and dull days, when the beds are cleared of their

summer occupants, it gives great satisfaction to know there is a fine batch of wallflowers to draw from to fill up the void, and, moreover, the hardy, easily grown wallflower is among the best of our spring flowers.

Although there is a number of varieties to choose from, the following can be strongly recommended. For early-flowering, the various forms of Phoenix should be chosen, and, if the weather is mild, it is more or less in bloom throughout the winter. The blood-red and yellow Phoenix are both useful. Among the later flowering kinds will be found Fire King, a vivid orange, and seen at a distance the colour appears to be almost scarlet. I noticed this fact particularly last year. A suitable companion to Fire King is Orange Bedder: it is a rich orange when first open, but changes with age to apricot yellow. Cloth of Gold is a bright yellow, and when associated with Royal Blue forget-me-nots is most effective. Everyone enjoys a good strain of the Blood Red wallflower, and it is well nigh indispensable.

Primrose Monarch is a pale yellow variety and one I do not care for, and the same remark applies to Miss Willmott, described as pure bright ruby, but miserably dull when compared with the kinds quoted above.

### THE SIBERIAN WALLFLOWER.

This plant, *Cheiranthus Allionii*, grows from 9ins. to 12ins. high, and produces

flowers of a bright orange colour. It may be sown at the same time as other wallflowers, and a large patch in the border is sure to attract considerable attention. It is not met with so frequently as its merits deserve.

### CHEIRANTHUS KEWENSIS.

Often described as half-hardy, this hybrid wallflower is never given any protection in the district of Chepstow, Mon., and it produces a fine display when other members of the family are over. The flowers open a pretty shade of primrose and change to mauve. With age the plants become somewhat leggy and untidy in appearance, but I find the best method is to raise seedlings annually, and dispense with the old plants after flowering. It is suitable for pot culture in a cool greenhouse.

### WALLFLOWERS FROM CUTTINGS.

A favourite of mine is the perennial old-world double wallflower, Harpur Crewe. It is a rich gold, about 12ins. high, and is very fragrant, somewhat resembling mignonette. Another single-flowered plant is Marshallii, a brilliant orange hybrid 9ins. to 12ins. high, but is not often seen in gardens. Both these plants are increased by cuttings, which will readily form roots about August if placed in sandy soil in a hand-light or cold frame.

T. W. BRISCOE.



# CONSERVATORY AND GREENHOUSE

**THYRSACANTHUS RUTILANS.**—This beautiful plant is generally regarded as being suitable only for the stove; it, however, develops its flowers perfectly in a warm greenhouse where the night temperature is kept at about 50° Fahr., producing its long drooping racemes of red flowers during March and April. Like many other plants of this class it should be grown in a temperature of about 60° Fahr. while it is making its growth, removing it to a cooler house for flowering.

The cuttings, which root readily in a warm propagating case, are best inserted singly in small pots about the beginning of May. The young plants should not be pinched, as it is desirable that they be as tall as possible for the proper display of the long drooping inflorescences; for this reason it is desirable to grow some of the plants on for the second year. During the first year good examples can be produced in 5in. pots. The plant grows freely in a compost of good medium loam, with the addition of some leaf-soil and sand, the proportions of leaf-soil and sand varying according to the character of the loam.

**TIGRIDIA PAVONIA** (Mexican tiger flower), of which there are several varieties, is hardy during the summer in warm situations in the South and West; in colder parts of the country it requires the shelter of a cool house, and it is surprising that it is not more generally grown in this way. Although the flowers are very fugacious, they are produced in succession over a long period. The dry bulbs can generally be purchased during autumn and winter, and may be potted during March and April.

They grow freely in any good, well drained potting compost. Five or six bulbs should be placed in 6in. or 7in. pots; these should be placed in cold frames or in a cool greenhouse, and water should be very sparingly afforded until the bulbs have started into growth and made a quantity of roots.

**ERYTHRINA CRISTA-GALLI.**—This plant is very useful for conservatory decoration during the summer months. Plants that have been stored dry all winter should now be started into growth in a cool house. After getting a good soaking at the root they soon start into growth. If it is desired to increase the stock, young shoots should be secured as cuttings when they are about 3ins. to 4ins. in length. These should be cut off at the base from the old root-stock,

and if inserted in light sandy soil they soon root in a close propagating case. Young stock can also be raised from seeds.

Until they are some three years old and have made a good woody root-stock, they should not be dried off too much during the winter, as they get shrivelled and fail to start into growth. Large specimens when in full flower are very handsome, with their dark red, lobster-claw-like flowers.



TIGRIDIA PAVONIA, NOTE THE TIGER'S HEAD IN THE FLOWER.

**HUMEA ELEGANS** should now be ready for placing in their flowering pots, which, according to the strength of the plants, may be 8ins. or 10ins. in size. This plant is generally regarded—and not without reason—as being somewhat difficult to grow successfully. Provided it is grown perfectly cool it should give little or no trouble in its younger stages; but, unless care be exercised during the final potting, trouble may be expected at this stage. Water should be carefully afforded at the root until the plants have got a good hold of the fresh compost.

Humeas are subject to attacks of green and white fly; they are also very susceptible to injury from fumigation and the use of insecticides but I find they suffer no injury from fumigation with hydrocyanic acid gas, using ½oz. of sodium cyanide per 1,000 cubic ft. Of course, the safety factor depends very largely on the plants being fairly dry at the root, and also on the house being at the proper temperature.

**LISIANTHUS RUSSELLIANUS.**

—This handsome plant, like many others belonging to the natural order Gentianeæ, has the reputation of being one of the most difficult plants to cultivate successfully. It is, however, so beautiful that it is well worth some extra trouble with a view to bringing it to perfection.

It is quite easily raised from seed, which is very fine and should be covered with just a sprinkling of sand. The seed pot should be covered with a piece of glass and be kept shaded until germination takes place. Most cultivators when dealing with this plant make the mistake of sowing it too early. Seed is best sown about the middle of May, the aim being to get a sturdy rosette of leaves developed before winter. If sown too early, the plants will probably make an attempt to flower during the autumn and thus weaken the plants for next year.

They are best wintered in a small house or pit in a temperature of 45° to 50° Fahr., watering them very carefully at all times. Having got them safely over the winter, and when they have started to make fresh growth in early spring, they should be placed in their flowering pots, which may be 5in. or 6in. according to the size of the plants. The compost should consist of good medium mellow loam, with the addition of some fibrous peat or flaky leaf-soil, and enough sand and some charcoal to keep the whole open and porous. Water must be very carefully afforded at all times. This

plant is also somewhat subject to attacks from thrips, which must be guarded against.

**LOBELIA TENUIOR** is very useful for greenhouse decoration during summer and autumn. For this purpose successional batches should be sown in a temperature of about 50° Fahr. When fit to handle, the young seedlings should be pricked off into small pots, putting four or five plants in a pot. As it becomes necessary they should be potted on until they are in their flowering pots.

J. COURTS.



# RHODODENDRONS AT VINCENT SQUARE

CONSIDERING the backward season, the collections of rhododendron blooms which constituted the main section of the Show at Vincent Square on May 5th and 6th were remarkably fine. This is one of the few plants in the showing of which amateurs predominate, and well they may, for it is mostly owing to the enthusiasm of a small and select band of amateurs that the rhododendron has achieved its present popularity. Apart from the criticism about the number of hybrids, which is dealt with in this week's Editorial, the only fault that could be found with the exhibits was that in many cases they were overcrowded owing to shortage of space. This made the picking out of individual plants a matter of some difficulty—that and the general excellence of the exhibits.

Mr. Lowinsky year by year stages a wonderful show of his fine hybrids, many of which are only suitable for indoor cultivation. This successful hybridiser has now achieved such a general degree of excellence that it is next to impossible to pick out a plant which excels its neighbour. In our opinion, however, the finest plant in his exhibit was *R. Wightii*, an old Himalayan species with creamy yellow bell-shaped flowers, blotched with deep crimson at the base. Undoubtedly Mr. Lowinsky possesses the best form in cultivation.

Lady Aberconway and the Hon. Harry MacLaren exhibited a fine representative collection of many of the best species and hybrids in cultivation, among them *Thomsoni* × *Kewense*, which is of a finer and deeper shade of rose than the commoner *Thomsoni* × *Fortunei*. On either end of this exhibit were fine vases of *R. Augustinii* of a good shade of blue-lilac, and *R. Benthamianum*, a purple triflorum from Szechuan and, for some reason or another, a rare plant in cultivation.

Mr. Lionel de Rothschild's exhibit was most noticeable for the big vase of *R. Loderi* which grows so well at Exbury. Probably every gardener will envy him for his form of *R. campanulatum*, Knap Hill variety, for which he obtained an award of merit. This is the cream of all campanulatuses, with its rich lilac blooms.

Another fine hybrid was to be seen on this stand—*R. Thomsoni* × *Mangles Scarlet*; this is far darker than the ordinary *R. Thomsoni* and has the rich appearance of a ripe plum.

Lieut.-Colonel Messel showed species and hybrids of excellent quality, among them a fine old pink arboreum called No. 1, which is the parent of many of the arboreum hybrids now in existence, and also a fine form of white arboreum. This exhibit was noticeable for the fine vases of *Acacia verticillata*. This was grown in a cool house, and is, without a doubt, one of the finest subjects for indoor decoration that we possess.

Mr. E. J. P. Magor's exhibit was noticeable for the finest blooms of *R. Augustinii* at the Show. This rhododendron is most variable in colour, but without a doubt Mr. Magor possesses one of the best forms in cultivation. It is as near blue as any rhododendron, and has a cool tint about it that is charming. He also showed *R. salwenense*, a dwarf with large open purple flowers that

will look particularly well planted in a mass in the rock garden.

Among the many rhododendrons on Colonel Stephenson Clarke's stand was a hybrid of *Griffithianum* and *campylocarpum*, aptly named *Pelican*. This had a large shapely truss of cream-tinted flowers with crimson at the base spreading up the throat. This is a fine hybrid, and it is hoped that it will be distributed in time. It was also pleasant to see *Ivory's Scarlet*, an old favourite and still one of the best reds in the garden.

Sir John Ramsden showed many fine species and hybrids, among them the *Duchess of Portland*, very old but probably the best white hybrid in cultivation; and *Gloriana*, a very fine red cross between *campylocarpum*



THE DEEP CRIMSON FLOWERS OF *R. SPERABILE* (FARRER 888).

and *barbatum*. In the original cross there are few signs of *campylocarpum*, but seedlings of this plant are showing a distinct throwback to *campylocarpum*, which only proves the difficulty of guessing at the parentage of hybrids.

Mr. Gerald Loder staged a most interesting collection of species and a few hybrids. Among the most noticeable were *R. diphrocalyx*, a red rhododendron with a split and most uneven calyx of the same shade as the petals, and a rhododendron named *argyrophyllum*. This rhododendron usually flowers in March and has a more decided tomentum on the undersurface of the leaf, but whatever it may be, it was distinctly attractive with bell-shaped trusses of a good pink.

Among the trade, Mr. Reuthe showed his usual fine assortment of hybrids and species, mostly hardy. Messrs. Gill, on the other hand, staged species and hybrids most of which will only grow out of doors in the mild West. Two of these are noticed in the plants which obtained awards.

Among Messrs. Veitch's stand of hybrids and species was a vase of *Cunningham's Sulphur*, that all-yellow rhododendron with caucasicum blood in it that was so nearly lost to cultivation a few years ago. It is pleasant to hear that this fine plant is again on the market in quantity. Messrs. C. B. van Nes of Boskoop showed several of their famous strain of hardy hybrids which are among the best in cultivation, among them *The Unknown Warrior*, a fine deep rose. They also staged an azalea which is noticed among the awards.

An interesting group, composed entirely of a new strain of *Primula pulverulenta*, was exhibited by Mr. G. H. Dalrymple. He was showing *P. pulverulenta* Lady Thursby and *P. pulverulenta* pink seedlings, both of which have been raised by him. *P. pulverulenta* Lady Thursby is not a hybrid. It is a true *P. pulverulenta*. The flowers are a soft, crushed strawberry pink, and are borne in three or four whorls on thick, stiff stems. The seedlings of *P. pulverulenta* were very similar, but the flowers were paler in colour, and some had a slightly darker eye.

The most brilliant picture among the alpine was a great drift of *gentianella*, shown by Clarence Elliott, round a solitary mountain of grey limestone, capped with a snowy patch of a very large-flowered and vigorous form of *Androsace arachnoidea*. At the foot of the mountain on the north side were a few plants of the rare *Gentiana pyrenaica*, with deep-throated little flowers of rich violet blue, which have been recently described in *THE GARDEN*. Dotted about in the sea of gentians was *Sisyrinchium filifolium*, which shows off its silky white flowers with their delicate purple veining by carrying them nearly upright, instead of dangling them like *S. grandiflorum*, and is easily the finest of its family, though at present the rarest. Mr. Wells, Junr., demonstrated this in another way, by showing a few clumps of his form of *gentianella* (obtained many years ago from an old garden), which were covered with buds and flowers.

Maurice Prichard showed several very interesting plants; *Arenaria verna*, a rare native that is not very showy, but makes a close turf, spangled with little white flowers, that serves as a perfect background for other small plants that like company; *Haberlea virginalis*, the white form, *H. Rhodopensis*, whose cold, alabaster flowers are even more exquisite than the lavender *gloxinias* of the type; *Anemone sylvestris* *Baikalensis*, a beautiful plant with a doubtful name, that seems identical with the large, free-flowering form of *A. sylvestris*, in the large creamy white flowers, with their tassel of soft yellow stamens in the centre.

Mr. Frederick Wood showed a vigorous form of *Primula chionantha*, whose tiers of white flowers, touched with grey and green about the calyx, stood out interestingly against the dusty purple background of a group of *Muscari paradoxus*; the white variety of *Viola cucullata*, with fine solid flowers, set off by neat black whiskers and a good form of the *Hose-in-Hose* cowslip from Ireland, named *Erin's Gem*, in which each of the flowers is almost completely reduplicated.



W. Wells, Junr., showed the double Marsh Marigold, a quaintly formal, old-fashioned flower that associates well with the double Lady's Smock; *Linaria æquitriloba* the microscopic snapdragon, and the rich golden saucers of *Geum montanum*.

Messrs. Bakers of Wolverhampton exhibited some unusual primulas; *P. anisodora*, which is very nearly ugly, with black buds and mahogany-coloured flowers, but made an amusing contrast with the prim innocence of *Ranunculus amplexicaulis*; *Primula secundiflora*, whose large drooping bells, deep pink outside and purplish crimson inside, are covered with a grey bloom.

Tucker and Sons of Oxford showed *Ranunculus Seguieri*, the beautiful white equivalent on the limestone of *R. glacialis*.

Among other exhibits were the following: ANEMONES.—Messrs. R. Gill and Sons and Reamsbottom and Co.

CARNATIONS.—Messrs. Allwood Bros., C. Engelmann and Stuart Low and Co.

CLEMATIS.—Messrs. L. R. Russell and Co.

DAHLIAS.—Messrs. J. Cheal and Sons.

GREENHOUSE PLANTS.—Messrs. L. R. Russell and Co. and Stuart Low and Co.

HYDRANGEAS.—Messrs. R. and C. Cuthbert.

NARCISSI.—Messrs. Barr and Sons, J. W. Barr and R. H. Bath.

PELARGONIUMS.—Messrs. Jarman and Co.

POLYANTHUS.—Messrs. John and A. H. Crook and G. A. Miller.

ROSES.—Messrs. Benj. R. Cant and Sons, Elisha Hicks and J. H. Pemberton.

SHRUBS.—Messrs. Cheal and Sons and R. C. Notcutt.

SHRUBS AND ALPINES.—Carter Page, K. and E. Hopkins, B. Ladham, Skelton and Kirby, W. H. Rogers, Waterers.

TULIPS.—Messrs. Barr and Sons and R. H. Bath.

VIOLAS.—Messrs. Carter Page and Jarman and Co.

### NEW AND RARE PLANTS.

AZALEA HOLLANDIA, a hardy seedling azalea, *Hinodegiri* × *Kämpferi*, showing obvious



AN INTERESTING GROUP OF PRIMULA PULVERULENTA LADY THURSBY.

signs of its parentage. Good rose and brick red colours and very floriferous. A fine addition to our hardy azaleas. Award of merit. Messrs. C. B. van Nes, Boskoop, Holland.

RHODODENDRON WILLIAM WATSON, foliage light green, flowers whitish pink in colour, petals spreading, about 3 ins. in diameter; *Aucklandii* blood. Award of merit. R. Gill and Son, Falmouth.

R. TEYSMANII.—A species found in Sumatra, with good foliage, slightly hairy, but no tomentum; flowers are like a large javanicum, three to a truss, white, 4 ins. in diameter, and a tube 4 ins. long. Should be

a valuable addition to our hot-house rhododendrons. First-class certificate. Messrs. R. Gill and Son, Falmouth.

R. DOROTHEA.—A hybrid, carrying a good truss of flowers 4-5 ins. across, of a delicate pale pink shade, with slight spotting on petals and pink deepening in tone towards the edge. Foliage long, of a pale dull green. Award of merit. Mr. T. H. Lowinsky, Sunninghill.

R. SPERABILE (Farrer 888).—A species which grows to about 6 ft. in height. Whole plant is hairy, and the undersurface of the leaves is very woolly. It carries a good close truss of a fine shade of deep crimson. A valuable acquisition. Award of merit. Mr. L. de Rothschild, Southampton.

R. CAMPANULATUM KNAP HILL VAR.—A very fine campanulatum, carrying loose trusses of bluish-lilac flowers blotched at the base and with spots on the petals of a deep wine colour. Award of merit. Mr. L. de Rothschild, Southampton.

ACER PSEUDO-PLATANUS VAR. BRILLIANTISSIMUM.—This is one of the many varieties of the common sycamore. It is, however, an exceedingly handsome one, as was seen by the branches shown, bearing leaves of a beautiful pinkish to coppery hue on unfolding. In addition, the foliage has a pleasant sheen which is decidedly characteristic. Shown by the Hon. Vicary Gibbs, Aldenham, Elstree.

RETINOSPORA PLUMOSA NANA COMPRESSA.—This variety has arisen as a sport from the type species *Retinospora plumosa*. It forms a dwarf, dense, bushy plant more or less conical in shape. The branches are crowded and even overlapping. The leaves are soft and awl-shaped, and are glaucous green in colour. It forms an excellent little pot plant and should prove admirable for out-of-door decoration, as it is absolutely hardy. Award of merit. Shown by Messrs. C. B. van Nes, Boskoop, Holland.

ROSE SYLVIA.—Another useful hybrid tea variety to be added to our ever increasing list. It is well supplied with long, good stems bearing large dull green leaves. The blooms are large, of good shape in all stages of growth, and are rose-pink in colour, with a slight fragrance. It is a variety which should prove popular in the garden. Award of merit. Shown by Mr. Walter Stevens, Hoddesdon.

ANEMONE HORTENSIS BLUE GOWN.—This is a charming and dainty variety of hortensis, bearing large double flowers of a lilac-blue



A FINE HARDY SEEDLING AZALEA, A. HOLLANDIA (A. HINODEGIRI × A. KÄMPFERI).



colour on stems from 6-8 ins. high. The colour is good and the form of the bloom perfect. It is a variety which should be cultivated with ease and success in warm dry borders or in rock gardens.

**SENECIO BEAUTY OF CAMBRIDGE.**—A really fine variety forming an excellent pot plant for indoor decoration, reaching almost 2 ft. in height and bearing numerous flowers from 1-1½ ins. across. In colour the petals are white with a tinge of blue at the tips. The foliage is also good, and provides a pleasant contrast. Award of merit. Shown by The Director, Botanic Gardens, Cambridge.

**NARCISSUS MOROCCO.**—This is a handsome Barrii variety with a white perianth. The blooms are large, of perfect shape and substance, and are carried well on long stems. The cupped corona is of a fiery orange shade tinged with red. Award of merit. Shown by Messrs. Herbert Chapman, Limited, Rye.

**NARCISSUS MRS. JOHN ROBINSON.**—An excellent Poeticus variety with well formed and regular blooms with a white perianth, while the cupped corona is deep yellow margined with orange. The flowers are also well carried on long erect stems. Award of merit. Shown by Mr. John Robinson, Kingswood, Bawtry, Yorks.

## ORCHIDS.

**ODONTOGLOSSUM WHITE ADMIRAL.**—Although of unrecorded parentage, this fine acquisition partakes much of the habit of a grand form of *Odontoglossum crispum*, the labellum being practically the only segment in which hybrid origin can be detected, and this suggesting that *O. Pescatorei* has been used in its making. The spike bore ten large flowers, with all the segments broadly developed and of unusually thick texture. The only colour is a slight rose tinge on the two lateral sepals, and a rich crimson-coloured blotch on the labellum near the apex of the crest. First-class certificate. Exhibited by

Lieut.-Colonel Sir George Holford, K.C.V.O., Westonbirt, Tetbury, Glos.

**MILTONIA PRINCESS MARY, STAMPERLAND VARIETY (M. Hyeana × M. Bleuana var. Reine Elisabeth).**—This pleasing hybrid carried a spike of five large flowers, the sepals flushed with crimson-rose, the petals to a much deeper tone, the labellum bears a brownish mask on its basal area. Award of merit. Shown by Mr. Robert Paterson, Stamperland, Cathcart, Glasgow.

**ODONTOGLOSSUM ELDORADO (eximium × Lakinæ).**—A showy hybrid with a spike of seven large flowers, fleshy in character, and with the segments symmetrically marked with reddish brown, the labellum has a spiny crest of yellow colour. Award of merit. From Messrs. Stuart Low and Co., Jarvisbrook, Sussex.

**ODONTOGLOSSUM FABIA VAR. SIR CHRISTOPHER WREN (Aglaon × eximium).**—A useful addition to the red section, the present example having a spike of eight moderate-sized flowers of crimson-red colour, a very narrow white margin to all the segments adding to its attraction. Award of merit. Shown by Mr. J. J. Bolton, Claygate, Surrey.

**SOPHRO-LÆLIO-CATTLEYA ST. GOTHARD (Sophronitis grandiflora × L.-C. St. Gothard).**—A remarkable result in which the influence of the former parent is strongly visible. Although not of large size, the colour is blood red, equally suffused throughout all the segments, thus showing a marked improvement on previous hybrids in this section. Award of merit. Exhibited by Mr. J. J. Bolton, Claygate, Surrey.

**EULOPHIA STREPTOPETALA.**—Two vigorous specimens of this species from British East Africa were shown by Mr. Wm. Van de Weyer, Clyffe House, Dorchester. The tall and erect spikes each bore upwards of thirty flowers and buds, the rich yellow colour of the petals and labellum being the attractive feature. Cultural commendation.

## THE AURICULA SHOW

THE annual show of the Southern Section of the National Primula and Auricula Society, which was held in conjunction with the R.H.S. meeting, was a very small affair, and had the exhibits of Mr. James Douglas been absent there would have been so little left that it could easily have been overlooked altogether.

It seems a pity that the old time interest in auriculas appears to be moribund, because they are very beautiful flowers and deserving of a much wider cultivation. True, the show varieties are somewhat difficult and hard to please, but success with them amply repays the necessary care and attention.

The twelve alpines for which Mr. Douglas was awarded the first prize included Day Dream, Angus, Roxburgh, Hector, The Laird, Purple Alpine and Admiration, and these were a good selection of the different colours. His dozen fancies were also of high quality and a representative selection would include Bronze 3 X, May Day, Pale Yellow, Prospero, Agnes, Maize and King of the Yellows.

The best six, in the first section, were shown by Mr. J. Stanbridge, Tottenham, while Mr. Ed. Heron-Allen, Selsey Hill, had the next four, and was also first with six alpines in the tyro's class, with highly creditable plants. Mr. J. T. Bennett Poe, had the best six alpines, and Mrs. Groves was first with four, and with six in the small growers' class.

Premier cards were awarded to Mr. Douglas for Green Parrot, a striking green-edged show variety, and to May Day, a most lovely rosy lilac Fancy. With Phyllis Douglas, a large purple flower with a velvety maroon sheen, Mrs. Groves won the alpine card.

Mr. G. W. Miller was the only exhibitor of primroses and polyanthus, along with auriculas, and was awarded all the first prizes.

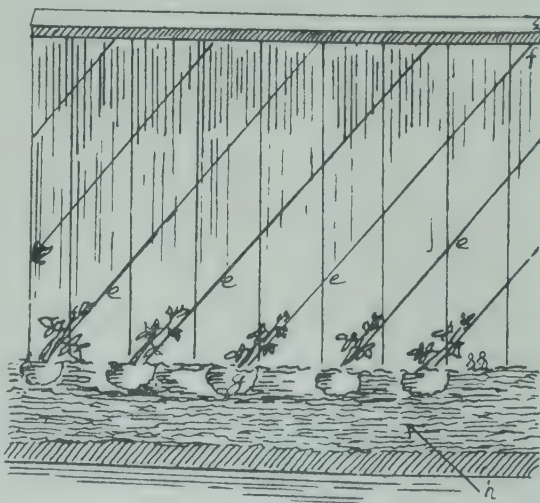
# SIMPLE GARDENING

## GLOXINIAS.

IN days long gone these plants were subjected to rather high temperatures; in fact, they were treated almost throughout their growing stages as stove subjects. Many amateurs are still under the impression that great heat is necessary to their successful cultivation; and, not possessing the means to provide such artificial heat, they do not attempt to grow the plants. There need not be any hesitation in the matter. Although it is not advisable to grow the plants in cold frames generally, I may say I have seen splendid batches of them in frames during the summer months. Young plants, raised from seeds sown in February, will flower from mid-August to early October; and bulbs started in a gentle heat at the same time will begin flowering early in June; thus we have, by growing both kinds of plants, flowers from June to October. The seedlings like a light loam, porous, with a tiny addition of peat or leaf-soil. At the final potting some well rotted manure will do a lot of good. Rotted manure and bone-meal may be included in the compost for the bulbs except in that in which they were started. At present the ideal position for the plants is one on a bed of ashes on a stage in a greenhouse.

## PLANTING TOMATOES OUTSIDE.

This note and the sketches are intended to be helpful to those persons who wish



to grow a few plants outside and have not had any previous experience or who possess poor accommodation for

the purpose. In many back gardens and also in small villa gardens there are fences or walls suitable for training the plants on, but not any borders. In such positions, nice, strong plants will, with ordinary care, yield a good average crop of fruit. The plants are not safe from frost outside before the second week in June, unless some temporary protection can be given. In the meantime, the soil should be prepared—good, fibrous, lumpy loam, a small quantity of leaf-soil and a handful of bone-meal to each bushel. Place gin. boards on edge, or bricks, slates or tiles, shown at *a*, 18 ins. from the wall; *b*, finer compost; *c*, roughest parts; *d*, the plants which should be gins. or 1 ft. high and sturdy. On low fences, train the plants, *e, e, e*, as shown from *f* to *g*; the border prepared being shown at *h*.

## ROSES UNDER GLASS.

We all love roses and are eager to grow plants that will bear blooms as early and as late as possible. It is seldom that the amateur can spare a house solely for roses, so that he decides to plant one or more in a greenhouse or conservatory which contains a miscellaneous collection of plants. My first experience of roses under glass was of *Souvenir d'un Ami* and *Maréchal Niel*. One specimen of the first-named, planted thirty years ago, still occupies the same position and flowers—moderately now—



No. 5



The  
Tennis Club  
Secretary

## Men who appreciate The **ATCO** MOTOR MOWER

The Tennis Club Secretary is responsible that the courts are kept in good condition and for this reason many secretaries provide their groundsmen with ATCO Motor Mowers. The letter reproduced above—received from the head groundsman at Wimbledon—fully endorses this policy. Free demonstration on your own grass without obligation.

16 inch Model £50 22 in. Model £75. 30 in. Model £95  
Personally Delivered and Guaranteed 12 months—  
5 per cent. for cash in 7 days.

*All who take a pride in their Lawns should send for free  
ATCO Booklets, "Turf Needs" and "Notes of Praise."*

**CHAS. H. PUGH, Limited**

Whitworth Works, 31, Tilton Road, BIRMINGHAM

All England Lawn Tennis Club,  
Wimbledon.

18. 6. 23.

Dear Sir,

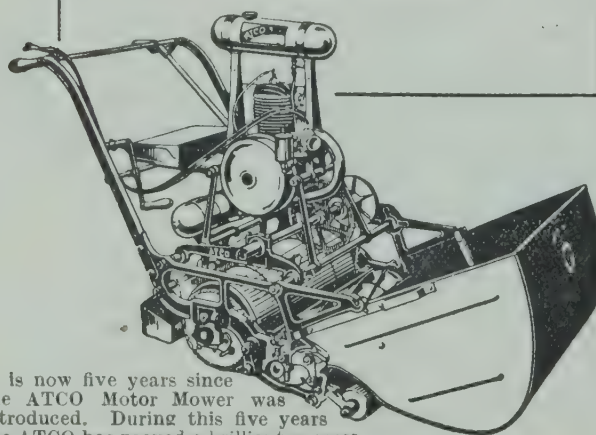
We have been using two of your  
Atco Motor Mowers with satis-  
faction. The job has been well  
thought out, particularly regard-  
ing accessibility for adjustment  
and cleaning. Balance is also  
good.

The Cultivator is a valuable  
accessory for tearing out the  
rough coarse grass and fining  
down a lawn.

Yours truly,

*Wm Coleman*

Hd. Groundman.



It is now five years since  
the ATCO Motor Mower was  
introduced. During this five years  
the ATCO has proved a brilliant success  
in the hands of every class of user.

# ROYAL HORTICULTURAL SOCIETY'S Great Spring Flower Show

TO BE HELD IN THE

ROYAL HOSPITAL GARDENS, CHELSEA, LONDON, S.W.

ON

May 19th, 20th, 21st, 22nd and 23rd, 1925

The Ranelagh Gardens adjoining the Show Ground will be open to visitors and provide a resting place for those who wish to sit in the shade or to meet their friends.

*The Band of the Royal Artillery will play in these Gardens each afternoon.*

ALL FELLOWS OF THE SOCIETY ARE ADMITTED FREE ON PRESENTATION OF THEIR TICKETS.

### PRICES OF ADMISSION TO NON-FELLOWS:

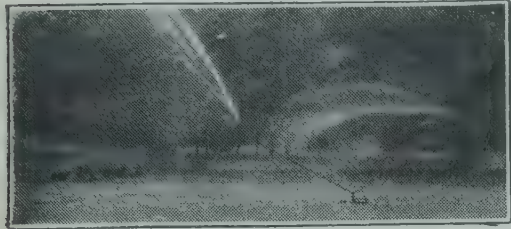
Tuesday, May 19th	..	..	..	2 p.m. to 7 p.m.	..	..	..	..	..	10/-
Wednesday, May 20th	..	..	..	9 a.m. to 7 p.m.	..	..	..	..	..	5/-
Thursday, May 21st	..	..	..	9 a.m. to 7 p.m.	..	..	..	..	..	2/6
Friday, May 22nd	..	..	..	9 a.m. to 7 p.m.	..	..	..	..	..	2/6
Saturday, May 23rd (closes at 5 p.m.)	..	..	..	9 a.m. to 5 p.m.	..	..	..	..	..	1/-



# THE 'PATTISSON' HORSE (LAWN) BOOTS

## THE NEW (PATENT) MAJESTIC REVOLVING SPRINKLER

The simplest and most efficient Sprinkler for large areas.



Made in three sizes.

No. 1 waters 500 square yards,

No. 2 waters 1,200 square yards,

No. 3 waters 2,000 square yards,

without being moved.

Illustrated Price List, with Testimonials, from the makers—

**H. PATTISSON & CO., STREATHAM, LONDON, S.W.16.**

Please mention THE GARDEN when writing.

"The ONLY Economical Ones."  
USED in the Royal and Thousands of the Principal Gardens, GOLF and CRICKET GROUNDS, and exclusively at the Oval (S.C.C.C.) for the past 20 years.  
OVER 10,000 SETS USED IN THE U.K.

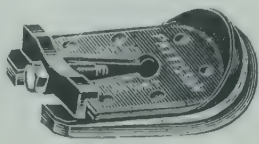


Fig. 1 for Shod Horses.

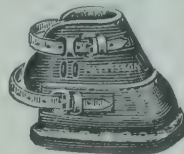


Fig. 2. Welshed Boot.

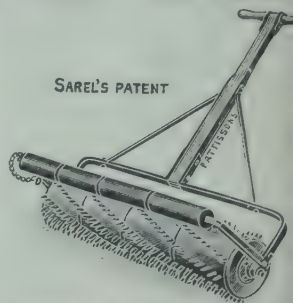
HUNDREDS OF TESTIMONIALS.

The Field says: "As good as anything that could be devised."

Mr. Wm. Hardy (Gardener to Lt.-Col. Hon. W. Guinness): "The boots supplied 17 years ago are still in use and have always been satisfactory."

## SAREL'S PATENT SPIKED ROLLER

COMM. HILLYARD, R.N., The All England Lawn Tennis Club, Wimbledon, writes: "The 'Sarel' Roller is invaluable for aerating the ground. It saves an enormous amount of labour and is most beneficial to the turf. I should be very sorry to be without such a valuable implement."



SAREL'S PATENT

SEE OUR STAND AT CHELSEA SHOW

THE PIONEERS OF ALL THAT IS BEST IN LAWN MOWERS

ESTD 1835

# GREEN'S



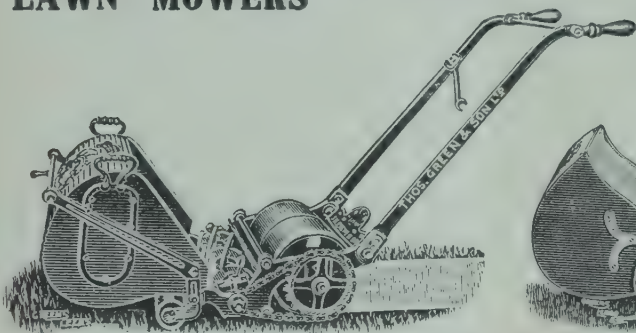
# WORLD FAMOUS LAWN MOWERS

By Special Appointment

To His Majesty the King.

GARDEN ROLLERS & TENNIS MARKERS

## GREEN'S "SILENS MESSOR" LAWN MOWERS



GREEN'S New Century Lawn Mower  
The Ideal Mower for small lawns, slopes, banks, &c.



Note the Model de Luxe "Silens Messor" Hand Lawn Mower fitted with Ball Bearings, etc., in List.

Over a Million Sold.

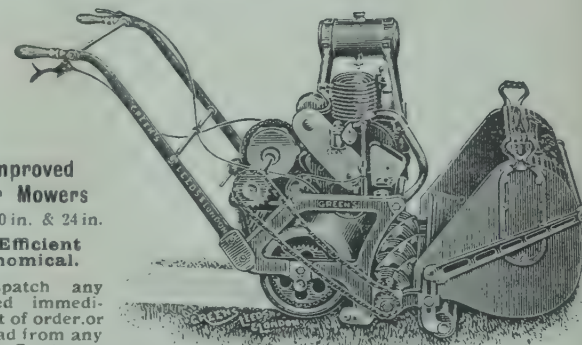
## MOTOR MOWERS

Made in Sizes 24 in. to 42 in.

Green's Improved Light Motor Mowers  
Sizes—16 in. 20 in. & 24 in.

Reliable, Efficient and Economical.

We can despatch any machine listed immediately on receipt of order, or they may be had from any Ironmonger or Seedsman in the United Kingdom.



Please write for Illustrated Price List No. 8, free.

THOMAS GREEN & SON, Ltd, Smithfield Ironworks, Leeds, and New Surrey Works, Southwark Street, London, S.E.1.

Please mention THE GARDEN when writing.

## KILOGRUB



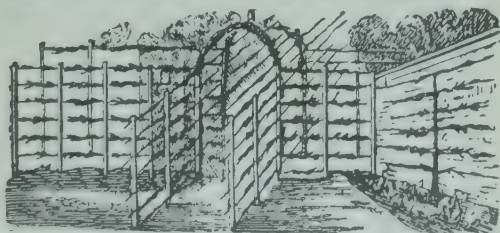
Exterminates all Garden Pests in the soil.  
Your Seedsman has it.

Tins:—9d., 1/6, and 2/6.

Bags:—1-cwt. 6/6; 1/2-cwt. 9/6; 1-cwt. 15/-.  
Write for particulars to the manufacturers:—  
JOHN PEAK & Co., Ltd., Wigan, Lancs.

## HILL & SMITH, Ltd., BRIERLEY HILL, STAFFS.

Makers of  
IRON FENCING, HURDLES, GATES, WIRE  
NETTING AND GARDEN IRONWORK



Other Products—Hay and Grain Sheds, Dutch Barns, Galvanized Corrugated Sheets and Structural Steelwork.

Catalogues free on mentioning this paper.

London: 8, VICTORIA ST., WESTMINSTER, S.W.1

Please mention THE GARDEN when writing.

## M. KOSTER & SONS' NEW HARDY RHODODENDRONS

Will be shown at the next

## CHELSEA SHOW

IN THE BIG TENT, STAND No. 13

## AZALEAS

will be shown outside at the southern end of the ground.

Every Nurseryman in Great Britain  
:: may book orders for the above ::

**M. KOSTER & SONS, BOSKOOP, HOLLAND**

Please mention THE GARDEN when writing.



every year. The chief difficulty met with is that of affording the plants proper treatment after the spring-flowering stage is passed. A thorough syringing with clear water does good, and also the admission of as much air as possible. When the new summer shoots begin to grow, cold draughts must be avoided or mildew will spread rapidly. Over-dryness of soil is harmful, as is also a too sodden state. Danger of the former exists when the border is small and in a warm position; the latter when the roots permeate soil under stages. Where possible, it is better to have the roots in outside borders. The mildew fungus may be kept under control by the judicious use of soft soap and sulphur or "Abol." Fumigation will keep down green aphides.

#### RE-POTTING TREE CARNATIONS.

The final re-potting of these [plants] will claim the attention of lovers of the flowers. To my knowledge, inexperienced cultivators subject the plants either to too much heat or expose them to a too low temperature. After the plants are well established in 5in. pots there should not be any undue delay in shifting them to the final ones, 6½ins. or 7½ins. across. Larger pots for single plants are not desirable. From the third week in June to the end of August, amateur cultivators would manage their plants better on a bed of ashes in a sheltered position outside than in a greenhouse. Good fibrous loam in which all grass has been dead at least one month should form the body of the compost. Take a bushel of loam as a

guide; add to it a 6in. potful of leaf-soil, a 3in. potful of bone-meal, a 5in. potful of wood ashes and a similar quantity of well-pounded bricks—old ones reduced to small bits—and a very good compost will be available. Before potting work is done the soil in the smaller ones should be examined and watered at least one hour before re-potting. It is not wise to shift the plants to larger pots while the soil is very dry or in a sodden condition. After potting the plants, place them under glass again and spray the foliage, but do not water the soil for one or two days; then fill up the pots with clear water and afterwards when it is required, so that the roots do not get too dry. Wait until the pots are fairly well filled with roots before applying stimulants.

GEORGE GARNER.

## NOTES FROM CONTRIBUTORS

#### PRIMULA WINTERI.

ALTHOUGH it is a good number of years since this charming Himalayan primrose was first introduced to cultivation, it is surprising it is not more often met with in different gardens throughout the country. This lovely plant inhabits the higher Alps and was discovered at an elevation of 12,000ft. It is therefore hardy in most parts of this country, in spite of our changeable climate. To grow it successfully in the rock garden, select a cool northern position, which must be thoroughly drained. The compost may consist of 2 parts of fibrous loam and 1 part each of leaf-soil and sand, with the addition of a little lime rubble (which the majority of primulas enjoy).

In districts where the rainfall is excessive, abundance of gritty sand must be used in the mixture, and especially round the collar of the plants. Unfortunately, the flowers of this alpine gem are often spoiled out of doors, flowering as it does during February and March. Should this be the case, it may be grown in pots or pans in a cold greenhouse or frame. It is an ideal subject for this purpose, and the flowers usually develop to perfection, as shown in the illustration. They are about the size of the common wild primrose, but are of a most beautiful delicate lavender-blue shade, with distinct zone of white round the conspicuous yellow eye, the edges of the petals being sharply serrated. The whole plant is freely powdered with white farina, which enhances the lovely colouring of the flowers to perfection. During the summer, plants that are grown in pots or pans are greatly improved by being plunged in ashes out of doors, and shaded during the hottest part of the day and liberally supplied with water. In the autumn they should be transferred to the cold frame or greenhouse again.

Primula Winteri is increased by seed when procurable, but appears to be a shy bearer in cultivation. It may also be divided when the plants show two or three crowns; this method may be done shortly after flowering, employing the same mixture of soil as already recommended for the rock garden. This charming species is worth any amount of trouble, due attention should be given to those small details.—GLENCAIRN.

#### ICELAND POPPIES.

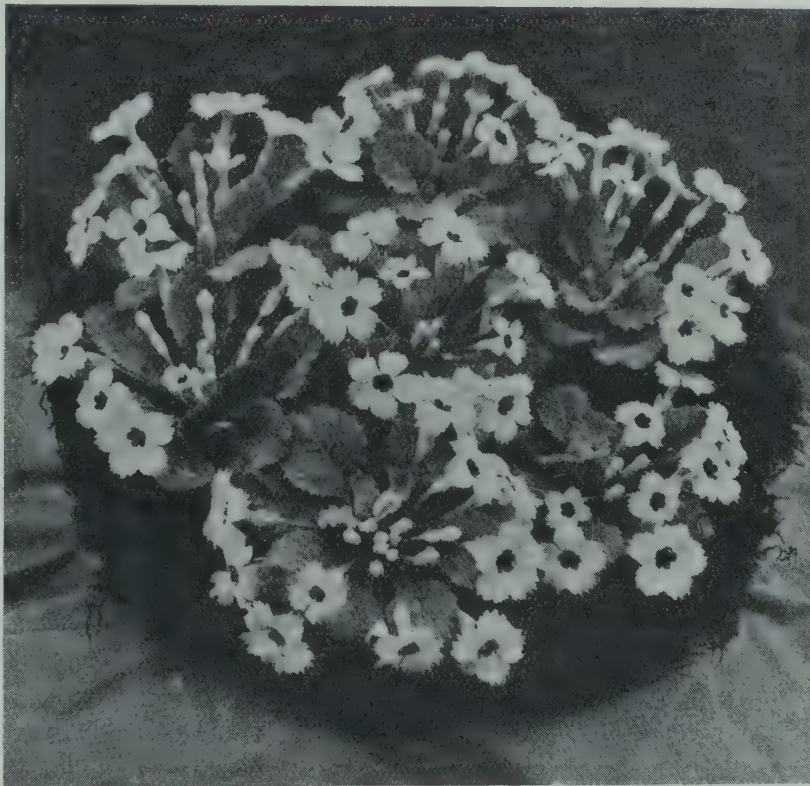
THE Iceland poppy is not difficult to rear from seed, which may be sown in the early spring where required to grow, and afterwards thinning out the seedlings to

to the greatest advantage by the fact that the stems are of a good length—up to 2ft.—and the blossoms poppy-like, droop upon the tall stalks in a very artistic fashion, making the flowers very valuable for cutting purposes.

A trade may also be done in the raising of plants, for these poppies are somewhat difficult to keep from year to year, and are best treated as biennials. It is best, as a rule, to sow in the open where the plants are to remain, and thin them out to the required distance apart, either for sale or for growing on to obtain cut flowers; and the cultivator who shows skill in raising a quantity of plants will reap a good harvest of profit.—R. D.

#### BABIANA STRICTA RUBRO CYANEA.

FEW will dispute the claim I make for this lovely and uncommon plant to be the flower of the flock. I had a letter recently from my good friend Mr. William Mauger of Guernsey in which he said, "I do wish you were here to see my batch of Babiana rubro-cyanea, which as I write is in full blow." I do indeed. If one thing would tempt me into an aeroplane, it would be the endeavour to catch such a sight before the sun went down. The soft medium blue flowers with their bright carmine centres need the kiss of a warm sun before they will open. The little bulbs planted rather thickly—say six to eight in a 5in. pot—make a fine show here in the west Midlands. What must a larger number in the sunnier and more genial climate of Guernsey be like? The sight is a bit of refined gloriousness; or a subdued—yet not subdued—brilliance. I called the plant uncommon in my opening sentence. It is quite correct to do so. How many private gardens have it? In how many bulb lists is it offered for sale? Yet it is quite easy to cultivate. With me it takes pot luck among the freesias. It shares their soil and lives happily among them during the whole cycle of its active life. The only difference that is made between them is that the babiana is given the warmest berth in the houses. It likes this little attention. One more fact in its favour. Half a dozen, well treated, soon increase into a nice little stock,



AN IDEAL PRIMULA FOR THE ALPINE HOUSE, P. WINTERI.

6ins. apart. Or seeds may be sown in August in shallow pans or boxes filled three parts with fibrous loam, one part leaf-mould, and half-part silver sand; the whole should be sifted finely. The seed should be sown thinly, and covered slightly with fine mould, then placed in a shady frame, and, when the seedlings can be handled, transplanted into boxes 3ins. apart in similar soil, wintered in a cold frame, and planted out in April.

It is almost impossible to describe adequately the exquisite beauty of the Iceland poppy (*Papaver nudicaule*), with its beautifully crinkled and fluted petals surrounding a charming centre of pollen-laden anthers, and emitting a perfume of the sweetest description, so that wherever offered the blooms always command a good price. The colours range from the purest white to the deepest red, and the intermediate shades are legion; moreover, the beauty is shown



I may add that the illustration in Nicholson's Dictionary is misleading. I would not know my plant from it.—JOSEPH JACOB.

### THE PRONUNCIATION OF BOTANICAL LATIN.

A RECENT paragraph in THE GARDEN discussed the genitive terminations in *i* and *ii*. I understand that an International Botanical Congress has laid down a ruling about them. When the name to be Latinised ends in a consonant, *ii* is added, except when the name ends in *er*, when *i* only is added. When the name ends in a vowel, *i* only is added, except when it ends in *a*, when *e* is added (so forming another genitive termination—the *æ* diphthong).

In the paragraph referred to, an objection was made to the *y* in *Henryus* (As the *y* in the English *Henry* stands for a vowel, I presume the "Latin" genitive will be *Henryi*—as from *Henryus*; not *Henryii*—as from *Henryius*.) but I think it need not trouble us. True, Latin had no *y* on its own native account, but only used it in copying Greek words; but why then may we not use it, if suitable, in copying English words? They are non-native enough (*Henryus* is!). We, at any rate, have put our *y* for the Latin *y* (or the original Greek *u*) in scores of words. Olympus, Odysseus, hyacinth, polyanthus, are instances.

Thinking of these matters, one is led to ask whether something might not be done for the better pronunciation of botanical Latin. Latin botanical names have become a necessary and an everyday part of gardening; some of them, perhaps, are used as often by the gardener as by the professor of botany. As it is, we run the risk of hearing three or four varying pronunciations of the same Latin word. It would be pleasant, if it is practicable, to lessen the danger.

The best—indeed, the only—way is to get the right pronunciation—as right, that is, as the English pronunciation of Latin allows. This means that we must treat botanical "dog-Latin" quite seriously, and very much as though it were real, good Latin. Is it worth while?

I think that it is worth while, because (1) as just said, it is the only means of securing uniformity in pronunciation, and (2) it is nothing like so difficult, even for the ordinary gardener, as people seem to suppose. It is "the ordinary gardener," let me say, whom I have in view, all the time. I believe that many gardeners and lovers of gardens would be only too glad of some clear guidance to the right pronunciation, if they could but get it.

What seems to be wanted is a little pronouncing dictionary of a special kind. It should be quite a small pocket volume, also quite small in price. It might, I imagine, be compiled in some part from existing dictionaries. It should contain the Latin names in alphabetical order. Only names of plants still "in commerce" would, I think, be needed. The length of each Latin syllable—short, long, or "long by position" (the "quantities," as they are called)—should be clearly marked; and there should be a separate mark for "long by position," quite distinct from the mark for the long vowel. (There is at present no such separate mark in use, but there ought to be.) The accent—the principal accent—should be marked for each word. If any eccentric foreign name (e.g., some Polish one) had to go in, a phonetic "pronunciation re-spelling" should be given. And it would be very desirable to give the English meaning of the "real" Latin words (or Greek words in a Latin dress)—e.g., *arenarius*, "pertaining to sand"; *microphylla*, "small-leaved." Finally, the type, the markings for length of syllable and for accent, etc., should be very clear. The user, it should be kept in mind, is possibly more at home with a spade than with a dictionary.

If the gardener looked up any Latin name herein, a glance at the "quantities" and the place of the accent would give him the pronunciation. Even if it came a bit strange for the first week or so, he would soon accustom himself to it. But, further, in front of the pronouncing dictionary, I think there ought to be some two or three pages of "Introductory Explanation." Here, the matter of "long by position" should be clearly explained—not merely stated—say, with an English, as well as a Latin, illustration. The Latin rules for the accent should be given. A few lines might go to these genitives in *i* and *ii*, or in *æ*; and perhaps a word be said about the pronunciation of the final short *e* in neuters like *affine*. And the nominative case of some four Latin adjectives might be cited, so that the different terminations for the masculine, feminine and neuter could be seen.

To the working gardener this may sound quite foreign, more or less difficult, and, therefore, uninviting. But it is not so; at least, it is not difficult. He is not being asked to learn Latin, or anything of the kind, but only to make himself familiar with a simple matter or two connected with the pronunciation of Latin. Let me emphasise this strongly. Any mystery there may be about the things just enumerated is more in their names than in the things themselves. Of such an Introductory Explanation, if its two or three pages were clearly and carefully done, he could get a general mastery in a few hours; allowing for consideration of novel ideas, and so on, let us put it at a dozen hours. To a small but helpful extent, he would then have an idea of the "why and wherefore," instead of taking it all "blindfold" from the dictionary part. The function of the Explanation part is to turn what might otherwise (to him) be senseless, dead enigmas into real, living, understandable things.

Opinions may differ as to the usefulness of the Explanation part, but I think few would deny the desirability, and in fact the positive need, of the Pronouncing part. Messrs. Barr and Sons, in the flower seeds section of their "Seed Guide," give the place of the accent. Anyone turning to the section can see what a help this is, and, incidentally, how important a part the accent

plays; and I think the thanks of the gardening world are once more due to Messrs. Barr. But the length of the syllables ought to be given in detail. If this Pronouncing Dictionary were done, any nurseryman, at the trouble of copying them, could give both length and accent in his list, and all should be asked to do so. If the dictionary were also in use at Kew, and other places where gardeners are trained, pronunciation "accidents" might gradually decline.—C. F. GRAY, Bournville.

### HONESTY.

WHAT we are apt to consider a common flower in the garden in the summer alongside other, admittedly beautiful, blossoms—Honesty—has an added value in dull winter days. The flowers which kept it company in the borders, faded in autumn were uprooted together with the pod-laden plants of this old and simple thing. These were trimmed and the shimmering silvery pods which held the seeds, now in vases before us, are a reminder of the worth of an old-time biennial. *Lunaria biennis* has its good qualities as a garden flower, but it is of course for its lasting propensities as an "everlasting" that we esteem it most. Somehow, many people, who would be glad of it for winter, forget that it is a biennial, that seed needs to be sown in the early summer for blooming the following year. It is oftener found in the country garden amid old-fashioned things like rosemary and lavender, orange and gold calendulas, Brompton stocks and Canterbury bells, than in more pretentious gardens.—W. LINDERS LEA.

### GARDENS OPEN TO THE PUBLIC.

By permission of Lady Loder the Leonardslee Gardens at Horsham will be open on Wednesday, Thursday and Saturday, May 20th, 21st and 23rd from 12 noon to 7 p.m., on behalf of the Sussex Hospitals. Admission 1s. It may be pointed out that these are the only days on which the gardens will be open to the public.

By permission of Dame Alice Godman, D.B.E., the gardens at South Lodge, Lower Beeding, Horsham, will be open on Thursday and Saturday, May 28th and 30th from 11 a.m. to 6.30 p.m. Entrance 1s.

He can only tackle them one at a time but—



# VERMOL

## KILLS WORMS AND GROWS GOOD GRASS

What users say of Vermol:—

P. D. ELLIS, ESQ., STOCKPORT GOLF CLUB, OFFERTON, Near STOCKPORT, writes—

"I beg to acknowledge receipt of the last parcel of VERMOL. I should just like to add that the past results that we have had from VERMOL have been really excellent and that our continued use of same is a guarantee of the high standard of your product."

Vermol Lawn Sand (Weed Killer)

Vermol Grass Manure (for impoverished turf)

Vermol Insecticide (for Leather-jackets and other soil pests)

Vermol Grass Seeds (Finest Mixtures for all purposes)

Above specialities also highly recommended.

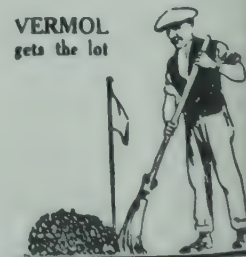
## VERMOL PRODUCTS CO.,

61, St. Mary Axe, London, E.C.3

Telephones: Avenue 1869 & 1870.

Telegrams: "Pinerous, Phone, London."

VERMOL gets the lot





## Glass House Building

THE building and designing of Glass Houses is a highly specialised work—that is, if the structure is to be correctly designed and built to last.

In dealing with the firm of Duncan Tucker & Sons, Ltd., you are obtaining the combined experience of many years devoted exclusively to the erection of every form of Glass House ranging from the modest "Lean-to" to the expansive Winter Garden.

Whether your enquiry is for renovating an existing Glass House or designing a new one you will receive the same courteous and prompt attention.



*If you are contemplating the erection of a Glass House we should be glad to send you interesting and helpful literature to aid you in your choice of a suitable structure.*

**Wm Duncan Tucker & Sons Ltd.**  
ESTABLISHED - 1830  
TOTTENHAM. N. 15.

*Gilbert Ad 2917.*

## MESSRS. WM. WOOD & SON LTD.

of TAPLOW, BUCKS

have the honour to invite the presence  
of THE READER to view their exhibits in  
the MAIN AVENUE at the CHELSEA SHOW  
OF

FORMAL GARDENS

SPECIALLY DESIGNED GARDEN & TEA HOUSES  
A NORFOLK REED THATCHED FRUIT ROOM  
CARNATION HOUSE

MELON AND CUCUMBER FRAMES

GARDEN ORNAMENTS AND FURNITURE

HARD TENNIS COURTS and

ALL KINDS of HORTICULTURAL REQUISITES

*R.H.S. Great Spring Show, Royal Hospital Gardens, Chelsea.  
Tuesday, May 19 to Saturday, May 23, 1925.*

Literature describing the ramifications of  
Wood's 'Garden Service' sent gratis by return.



"NEVER WORKED SUCH A SATISFACTORY AND ECONOMIC GREENHOUSE HEATING APPARATUS AS YOUR

## 'HORSE SHOE' BOILER"

WRITES ONE OF THE MANY ENTHUSIASTIC OWNERS.

"I have two, one heating a long Vinery and one a little Hothouse. Last autumn 12/- worth of slack finished off the Grapes, and we sold £3 worth, besides what I gave away. This spring all seeds raised in a case over the boiler in the hothouse **fires settled up** about 5.30 require no attention till 7.30 next morning. I thought we ought to let you know this."—May 7th, 1924. Miss—, Traverston, Nenagh, Co. Tipperary.

Why not investigate the sterling qualities of the "HORSE SHOE," and get that heating proposition settled now?



Used in the R.H.S. Gardens

To CHAS. P. KINNELL & CO., LTD.,  
Engineers, Southwark Street, S.E.1.

Please send me Booklet E "Making the most of your Greenhouse," and price of complete Outfit to suit (span-roof) (lean-to) greenhouse.....long  
.....wide inside, sides of (wood) brick.....thick

Name.....

Address.....

\*Strike out particulars not needed.

Cut out and send by **4d. post.**

Wire:  
"Kinnell-Boroh-  
London."

CHAS. P. KINNELL & CO., LTD.  
65, SOUTHWARK STREET, LONDON, S.E.1

Phone:  
Hop 362  
(Three lines).

Please mention THE GARDEN when writing.

### CRISP'S PERENNIAL BROCCOLI

Lasts many years and gives a crop each year of from 5 to 12 good heads.

SOW SEED NOW, 1/- per Packet; or place your order for plants to be sent in May, 1/- per doz., 5/- per 100.

H. C. GROOM & CO., 5, Guilden Sutton, CHESTER

### WM. ARTINDALE & SON,

NURSERYMEN—SHEFFIELD

Winners of the

SIR ALBERT STEPHENSON SILVER CUP AT THE SOUTHPORT FLORAL FETE FOR GLADIOLI

—CATALOGUES ON APPLICATION—

Please mention THE GARDEN when writing.

### VIOLETS.

MISS STANISTREET offers healthy young plants, selected and packed by an expert.

King of the Belgians, largest deep purple single, hardy and very fragrant, 5/6 doz.

Marie Louise Improved, largest deep purple double, 5/- "

Lady Hum-Campbell, largest double lavender .. 5/- "

Comte de Brazza, largest double snow white .. 5/- "

Also for ROCK GARDENS AND NATURALIZING.

2 each of 8 different coloured, hardy, scented Violets, in exquisite shades of rose pink, apricot, mauve, etc., very rare, 7/6, all post free.

Killaloe, Co. Clare, IRELAND.

Please mention THE GARDEN when writing.

### BRENTWOOD MODERN DAHLIAS

Many of the best varieties were raised and sent out from here. Those who desire to have a gay garden during summer and autumn should purchase now. Prices and catalogues can be obtained from—

J. T. WEST, Tower Hill, Brentwood, Essex

Please mention THE GARDEN when writing.



TO Beautify the Garden.

This charming new design

Fluted  
BIRDS' BATH  
& PEDESTAL

2ft. diameter.

Special Price

£5 5 0

"Boy with Frog" figure, 35/-

Illustrated Booklet "Ideal Garden Ornaments," post free.

SANDERS & CO., Sundial House,  
365, Euston Rd., London, N.W.1

Please mention THE GARDEN when writing.

### WEEDS

One application of

HARRISON'S Reliable WEED KILLER

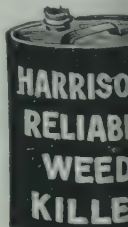
will keep your Garden Paths, Carriage Drives, etc., free from weeds for at least 12 months. The best Killer for Daisy, Plantain and Dandelion in Lawns Brightens the Gravel. Immense Saving in Labour

5 Gallons .. 23/6 Drum .. 12/- extra, Carr. Paid  
10 " .. 42/6 " .. 15/- " " "  
40 " .. 150/- Cask .. 80/- " " "

Irish orders are not subject to these carriage terms but are paid to any English port. Full price allowed for drums and casks if returned in good condition carrying paid within 2 months.

N.B.—In the prices of the above please note that this Weed Killer mixes 1 to 50 of water, being double the ordinary strength. One gallon mixed with 50 gallons of water will cover an area of from 150 to 200 square yards effectively.

G. HARRISON,  
Horticultural Chemist,  
READING.



Please mention THE GARDEN when writing.

### TANNED GARDEN NETS

Small Mesh for Seeds and Fruit Protection  
60 yds. long, 1 yd. wide 5/- 60 yds. long, 4 yds. wide 10/-  
60 " 2 " 10/- 60 " 5 " 15/-  
60 " 3 " 15/- 60 " 6 " 20/-  
Half Lengths supplied.

### STOUT BLACK NETS

for Tennis Court Bordering, with Lines Top and Bottom

30 yards long, 2 yards wide .. 20/-  
30 " 3 " .. 30/-  
30 " 4 " .. 40/-

Standards for same, 10 ft. high, 3/6 each. All carr. paid.

H. ROBINSON,  
Garden and Tennis Net Works, RY

Please mention THE GARDEN when writing.

### MANURES.

The most complete little book on the subject is "The Manual of Manures," by H. VENDEL 4/5; by post, 4/9. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.

### POTATOES: HOW TO GET THE BEST

CROPS. A booklet that is full of useful information EDWIN BECKETT, V.M.H., 9d. net, by post 11d. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.



WATTLE  
HURDLE

6 feet long

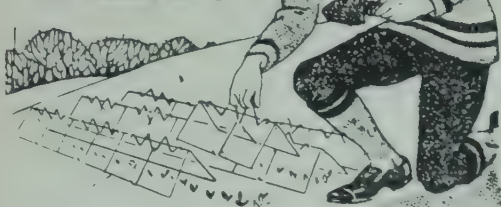
24, 30, 36, 42, 48, 54, 60, 72 inches high

PLEASE STATE QUANTITY

ERNEST R. SMITH & CO., Haslemere, Surrey

Please mention THE GARDEN when writing.

"Fine!"



—just as if  
they'd had  
nothing but sunshine!

For General Use  
send for this case of  
"A" pattern Cloches.  
Each Cloche 7ins. high.  
Case contains 12  
Cloches, covering  
14 feet .. 18/-

For Larger Plants  
order "B" Cloches,  
9ins. high. Set of 15,  
enough to cover  
22½ feet .. 35/-



Carriage  
Paid  
Home.  
(Scotland  
2d. in 1/-  
extra.)

THE CHASE CONTINUOUS CLOCHE lets in all the sunshine and traps it—keeping your young plants always healthily warm during the coldest days and nights. Perfect ventilation. No codling. No transplanting needed. Need not be removed for watering. Plants grow under it just as they would in the open in CONTINUOUS perfect weather.

Full particulars and prices in  
FREE BOOKLET  
No. 7  
from

Chase Continuous Cloche  
Trap to catch the Sunbeams

Dept. 7, Chertsey, Surrey





# THE GARDEN.

**WATERER'S GOLD MEDAL RHODODENDRONS** and Azaleas, Rare Hardy Shrubs, Alpine and Perennial Plants, Vegetable and Flower Seeds, Outdoor Chrysanthemums, Bedding Plants and Dahlias. Catalogues Free.—**JOHN WATERER, LONDON AND CRISP, LIMITED**, Twyford (Berks.), Bagshot (Surrey), London.

**WAKELEY'S PATENTED HOP MANURE.** The original and only substitute for Stable Manure. See advert on page vi.

**WM. DUNCAN TUCKER & SONS, LTD.**, Lawrence Road, South Tottenham, N.15.—Conservatories, Winter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**BIRDS' BATHS, GARDEN VASES, SUN-BATHS, NESTING BOXES.** Catalogue (No. 4) free.—**BORTON**, 60, Buckingham Palace Road, S.W.

**GARDEN SPADES, SPECIAL, 2/6, HAND RUBBERS, 1/6.** Carriage Paid.—**MCINTOSH**, Forgue, Abernethy.

**TANNED GARDEN NETTING**, small mesh, 1 yd. to 40 yds. by 1 yd., 2s.; 25 yds. by 2 yds., 4s.; 40 yds. by 1 yd., 3d.; 40 yds. by 2 yds., 6s. 6d.; 40 yds. by 3 yds., 9s. 9d.; carriage paid. Compare our netting with others. Lists now ready.—**GALLOP**, Net Manufacturer, Hastings. Telephone: 352.

**WELLS' CATALOGUE OF CHRYSANTHEMUMS** now ready, and will be sent post free on application.—**WELLS & Co.**, Merstham, Surrey.

**WM. ARTINDALE & SON**, Nether Green Nursery, Sheffield, will be pleased to send their Catalogues Hardy Plants, Seeds and Gladioli on request.

**TENNIS BOUNDARY NETTING**, 50 yds. x 25 yds., 20/-. Iron Standards, 9 ft., 3/- each. Tennis Nets from 1/6. Sports Lists now ready.—**GALLOP**, Net Manufacturer, Hastings.

**IPSWICH RARE SEEDS.** Catalogue describing nearly 3,000 kinds now ready. Free on application to **COMPSON & MORGAN**, London Road, Ipswich.

**BOOK OF WISE SAWS AND MODERN PLANTING.** Our catalogue offers all that is brightest and best for the present day garden. The choice plant at Sixpence a copy may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—**FEILDEN AND CROUCH**, 2, Great Nurseries, Wrotham, Kent.

**ROCK PLANTS. RARE SPECIES, AND HYBRIDS.** List Free. Rock Garden always open for inspection.—**MISS TAYLOR**, Quarry Orchard, Cleurs, Reigate.

**NEW ZEALAND PLANTS** for Seaside Gardens.—**Pittosporum nigriscens** for hedges, pot grown plants for planting, now 18/- per doz. **Olearia Macrodonia**, 12/- doz., splendid for hedges. **Olearia Haasti**, 1 ft., 1/- per doz. **Brachyglottis repanda**, 2/6 and 3/6 each. **Muhlenbergia indivisa**, 2/6 each. **Ozothamnus**, 2/6 each. **Muhlenbergia complexa**, 1/6 each.—**TRESEDER & Co.**, The Nurseries, Rye.

**GARDEN NETS**, tanned, small mesh, for Fruit, Seeds, and Strawberry protection. 30 yds. long, 2 yds. wide, 4/6; 30 yds. by 3 yds., 7/-; 30 yds. by 4 yds., 9/-; 30 yds. by 5 yds., 11/6; 30 yds. by 6 yds., 14/-. Carr. paid.—**ALFRED BINSON**, Garden Net Works, Rye.

**LOOK!" STOUT NETS**, for Tennis Court Covering, lined top and bottom, 30 yds. long 2 yds. wide, 16/-; 30 yds. by 3 yds., 22/-; 30 yds. by 4 yds., 30/-. Standards for the (wooden) 10 ft. high, 3/- each. All carr. paid.—**COUSSENS & Co.**, Tennis Net Works, Rye.

**IMPROVE YOUR GARDEN** by the use of Oak Trellis Screens; they are ideal for growing creepers of all kinds and for securing privacy, at the same time adding an artistic feature that will last a lifetime (being pickled in preservative). No trouble to erect (being made in sections). Get for lists and get an estimate from **W. T. REVITT**, Railway Works, Olney.

**BARR'S SEEDS FOR MAY SOWING**, for Vegetable and Flower Garden, Rock Garden and Greenhouse. Finest selected strains and tested growth. Special List Free.—**BARR AND SONS**, 11, 12 and 13, King Street, Covent Garden, London, W.C.2.

**THE DOUGLAS CLOVES AND BORDER CARNATIONS**; glorious scent, stiff stems, and continuous flowering. The new crop of seed is now ready to sow. 2s. 6d and 5s. per packet. Plant catalogue now ready.—**J. DOUGLAS** (The Premier House for Carnations), Gt. Bookham.

**IRON AND WIRE FENCING FOR GARDENS.**—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—**BOULTON AND PAUL, LIMITED**, Norwich.

**SEWAGE DISPOSAL FOR COUNTRY HOUSES.**—No emptying of cesspools; a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—**WILLIAM BEATTIE**, 8, Lower Grosvenor Place, Westminster.

**JAMES BACKHOUSE, F.L.S., F.R.H.S.**, for many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to **CAER FBOLA**, Arthog, North Wales.

**LAXTON'S STRAWBERRIES AND FRUIT TREES.**—We shall be exhibiting at Chelsea Show our New Strawberries for 1925, and the old ones. Large Tent, Stand No. U.—**LAXTON BROTHERS**, Bedford.

**CHOICE NEW CHRYSANTHEMUMS.**—Our Catalogue of nearly 900 varieties, including Grand Novelties for 1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready. Post free on application.—**J. W. COLE AND SON**, Chrysanthemum Specialists, Peterborough.

**GARDEN NETS.**—Best tanned, small mesh, 25 yds. by 1 yd., 2/-; 25 yds. by 2 yds., 4/-; 25 yds. by 3 yds., 6/-; 25 yds. by 4 yds., 8/-. Carr. Paid. Satisfaction guaranteed. Tennis nets from 10/-. Special nets for tennis boundary. Pea training nets. Lists and samples free.—**G. JARRETT**, Net-maker, Rye.

**VANCOUVER ISLAND** and Pacific Coast rare ornamental alpine and woodland plants, bulbs, etc. Only those difficult or impossible to obtain in England are offered. Plants well packed and despatched at the right time of year arrive in good condition. Write for list.—**J. BENNETT**, Lake Hill P.O., Victoria, B.C., Canada.

**GENTIANA FARRERI**, 2/- and 2/6; **G. acaulis**, 4d.; dozen 3/6. **Pompadour Primroses**, 2/- each, etc. Postage extra.—**WYNNE**, Avoca, Ireland.

**CRAZY PAVING.**—Dwarf Walling, Rockery Stone direct from quarries. Cheapest and most artistic on market.—**CLAYTON AND HAMMOND, LIMITED**, 53, Baker Street, W.1.

**SUNDIALS, BIRD BATHS, VASES.**—In Imperishable Reconstructed Stone. Write for catalogue G2.—**CLAYTON AND HAMMOND, LIMITED**, 53, Baker Street, W.1.

**LOOK! TANNED GARDEN NETS.**—All orders despatched same day. 25 yards by 1 yard, 2/-; 25 by 2, 4/-; 25 by 3, 6/-. Odd netting for bushes, 6 lbs. for 2/6. All carriage paid. Any sizes supplied. Also Tennis Boundary Nets.—**MOORE & Co.**, Net Works, Rye.

**EDINBURGH ROYAL BOTANIC GARDEN GUILD.**—The Secretary (*pro tem.*), A. McCutcheon, would be pleased to receive the name and address of anyone who has served in the Royal Botanic Garden.

**LABELS TO LAST—AT LAST!**—You write by any nail point, on prepared (Patented) Metal, yet it cannot fade. Severely tested for years on inventor's Nurseries. The R.H.S., after long trial, award H.C. List of shapes free. Samples 2d.—**WEBSTERS PATENTS Co.**, Witheridge, Devon.

**SUTTON'S WALLFLOWERS.** The cultivation of the Wallflower was revolutionised when we introduced the wonderful Orange-Scarlet varieties, and we strongly recommend flower lovers to try the following:—**SUTTON'S FIRE KING** (orange-scarlet). **SUTTON'S ORANGE BEDDER** (vivid orange). **SUTTON'S CLOTH OF GOLD**. **SUTTON'S GIANT VULCAN** (a fine crimson variety). Each Per Packet, 2/6 and 1/6. **SUTTON AND SONS, THE KING'S SEEDSMEN, READING.**

**BATH'S SELECT SEEDS AND PLANTS.**—New Illustrated Catalogue of choice Vegetable and Flower Seeds and Plants is now ready, and will be sent post free on application.—(Dept. E), **R. H. BATH, LTD.**, Floral Farms, Wisbech.

**DOBBIE'S 1925 CATALOGUE AND GUIDE**, 136 pages, 194 illustrations. Free to all readers. Please mention THE GARDEN when writing.—**DOBBIE & Co., LTD.**, Edinburgh.

**CHEAP GOVERNMENT WIRE!!!** Great for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760 yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—**GREEN'S GOVERNMENT STORES**, 69, Albert Street, Lytham.

**HERRING NETS** for protecting seeds, fruit, etc., approximately 100 ft. by 30 ft., 11/6 each. Other nets, better quality, 21/- each. Carriage paid. Cash with order.—**WM. G. GRIGOR**, Earl Street, Port Gordon, Banffshire.

**MICHAELMAS DAISIES.**—Pyrethrums and other hardy perennials. For new catalogue write to Mrs. **THORNELY**, Nursted, Devizes.

**GARDEN NETTING.**—Best selected, small mesh, tanned, 25 by 4 yds., 8/-, or 8 yds., 16/-. Carriage paid. Tennis Nets and Standards. List free.—**STRAWBERRY NETTING Co.**, 5, Suffolk Terrace, Lowestoft.

**WALL AND WATER GARDENS.** With chapters on rock gardens, heath gardens, and paved water gardens. By **GERTRUDE JEKYLL**. 7th edition, revised. 17s. 6d. net; by post, 18s. 4d.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**THE CULTURE OF CHRYSANTHEMUMS.** By **W. WELLS**, 2/6 net; cloth, 3/6 net; by post 6d. extra.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**GARDEN DESIGN** is best dealt with in "Planning and Planting of Little Gardens," by **G. DILLISTONE**, 6/-; by post, 6/6. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**SWEET PEAS AND HOW TO EXCEL WITH THEM.** By **HORACE WRIGHT**, 9d. net, by post 11d. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**SCOTCH CABBAGE PLANTS.—BEST PLANTS, LOWEST PRICES.** Price List of autumn sown of all varieties (excepting Brussels Sprouts, Curled Greens and Reds, which are sold out), grown from our famed select stocks, for prompt delivery, carriage paid to any district in Britain, on application.—**JOHN GILLIES, PRESTONPANS, LIMITED**, Prestonpans, East Lothian, largest cabbage plant growers in Britain. Established over 50 years. Telegrams "Plants, Prestonpans." Telephone 24 Prestonpans.

**FERNS, CHOICE AND RARE.**—Please inspect my exhibit Table O, Chelsea Show. 24 different, named, 30/- carriage paid. List free.—**ELLISONS**, West Bromwich. Established 1890.

**GREENHOUSE PAINTING AND GLAZING.**—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7 lb. tins., 4/- post free; 14 lb. tins., 5/6, each, carriage extra, tins free.—Full particulars from **W. CARSON & SONS**, Grove Works, Battersea, S.W.11.



## The Raiser of Violas

Blanche, Councillor Waters,  
John Quarton, Mauve Queen,  
Mrs. Chichester, Swan, Seagull,  
Newton Mauve, etc., etc.,  
offers these and many others at  
reasonable prices.

SEND FOR CATALOGUE  
or one of these collections:—

Collection V. 1—		
12 Plants, all different	- -	3/3
Collection V. 2—		
50 Plants in 5 varieties	- -	10/-
Collection V. 3—		
100 Plants 10 each of 10 varieties	-	18/3

All Carriage Free for Cash with Order.

**WM. SYDENHAM**  
The Gayborder Nursery  
Melbourne :: DERBY

Please mention THE GARDEN when writing.

Send your Enquiries NOW for  
Autumn Planting of

## CHOICE DAFFODILS BRITISH GROWN BULBS

COMPLETE CATALOGUE NOW  
READY, FREE ON APPLICATION

**Cartwright & Goodwin Ltd.**

BULB GROWERS,  
CHURCHILL, KIDDERMINSTER,  
WORCS., ENGLAND.

Please mention THE GARDEN when writing.

## PERPETUAL FLOWERING CARNATIONS

We have large stocks of excellent young  
plants, ex 3½ in. pots—which are stopped,  
with several shoots.

COLLECTION 1  
12 plants in 12 choice varieties .. 16/-

COLLECTION 2  
12 plants in 12 distinct varieties .. 12/6

Special quotations for 50 or 100 plants.

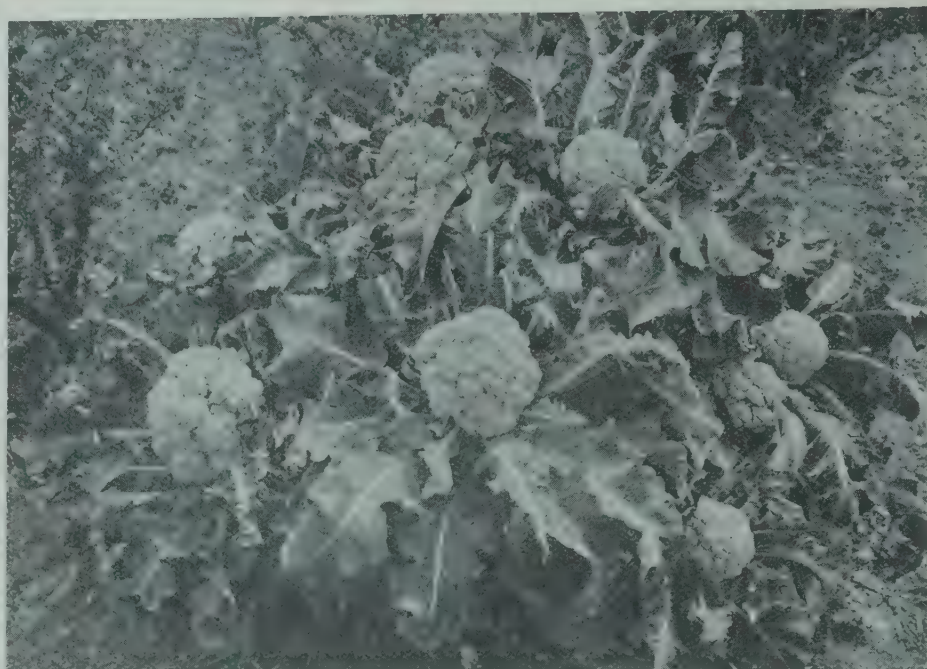
Exhibiting at Chelsea Show, Tent 2, a group of  
Perpetual Flowering Carnations in the newest  
and best varieties.

General Catalogue or Novelty List free on request to—

**KEITH LUXFORD & CO.**  
Sheering Nurseries, HARLOW, ESSEX  
And at SAWBRIDGEWORTH, HERTS.

Please mention THE GARDEN when writing.

## CRISP'S PERENNIAL BROCCOLI



THIS illustration  
of a four-year-old  
plant of Crisp  
Perennial Broccoli  
Nine good large heads  
and several small  
ones were cut from  
this plant, which  
perfectly healthy  
has every appearance  
lasting many years.  
The heads are solid  
and firm and of a light  
cream colour, tender  
and of very good  
flavour.

Seed 1/- per packet  
3 for 2/6

Plants 1/- per dozen  
5/- per 100.

Ready Now.

Special Offer—12 Outdoor Chrysanthemums in six colours for 2/-.

**H. C. GROOM & CO., Guilden Sutton, CHESTER**

## MERRYWEATHER'S ROSES

FOR THE GARDEN!

FOR EXHIBITION!

FOR BEDS!

FOR EVERYWHERE!

Also Fruit Trees, Shrubs, Ornamental Trees.

BUY HOME GROWN TREES.

SUPPORT BRITISH INDUSTRIES.

Catalogue Free on Application, and Addresses booked for Revised Catalogue in  
late Summer.

**H. MERRYWEATHER & SONS, LTD.**

Garden Specialists, SOUTHWELL, NOTTS.

## Barr's Seeds for May Sowing

OF FINEST STRAINS AND TESTED GROWTH.

For the Flower Garden and Greenhouse.

Antirrhinums, Aquilegias, Campanulas, Canterbury Bells,  
Calceolarias, Cinerarias, Delphiniums, Forget-me-nots,  
Hollyhocks, Lupins, Pansies, Primulas, Polyanthus,  
Primroses, Sweet Williams, Stocks, Wallflowers, etc.

For the Vegetable Garden.

Beans, Beet, Carrots, Peas, Spinach, Lettuce, Radish, etc.

SPECIAL LIST ON APPLICATION.

**BARR & SONS,** 11, 12 & 13, KING STREET,  
COVENT GARDEN, LONDON, W.C.2



WE SPECIALIZE

IN

Gold Medal Shrubs  
Gold Medal Roses -  
Gold Medal Daffodils

Before placing your orders,  
compare our prices with  
those of other growers for  
tip-top quality.

CATALOGUES FREE  
ON APPLICATION.

**DONARD NURSERY Co.**  
NEWCASTLE :: CO. DOWN



**KILLS WEEDS.**  
Fertilizes the Grass.

**THE LAWN IMPROVER**  
with 30 years reputation to  
uphold. Full particulars from  
**GARDEN SUPPLIES, LTD.,**  
Cranmer Street . . Liverpool.

## CARNATIONS for Garden & Greenhouse

### PERPETUAL FLOWERING (Greenhouse) Varieties

We carry large stocks—  
rigidly selected—of all the  
best varieties. For im-  
mediate flower we offer  
fine plants in 6" pots in  
bud. Young stock, ex 3 1/4"  
pots, stopped and broken,  
to pot along, or plant,  
ready now.

All Collections are carr.  
and packing paid for cash

6 plants	6" pots	ex 3 1/4" pots
in variety	24/-	8/6
12 " "	45/-	16/-
25 " "	80/-	30/-

**ALLWOODII** (half Pink, half Carnation)  
New and delightful self colour have been introduced in  
the ever popular Allwoodii—the hardy plant which  
grows and flowers in every garden and window-box.  
The collections quoted below are exceptional value, and  
include many quite new and unique varieties.  
6 plants in variety, 6/6 12 plants in variety, 12/-  
25 plants in variety, 22/6

### HARDY PERPETUAL BORDER CARNATIONS

Will eventually supersede the old Border type, being  
hardier, freer flowering, carrying bolder and more  
sweetly perfumed flowers. A much wider range of  
colour is now obtainable, and the following collections  
are first-class value, embracing many of the later kinds.  
All plants ex 3 1/4" pots—immediate delivery.  
6 plants in variety, 15/- 12 plants in variety, 27/6  
CATALOGUE of all CARNATIONS POST FREE ON REQUEST  
but order the above collections at once for prompt  
delivery, and exceptional value.

**Allwood Bros**  
Dept. 4, Haywards Heath, Sussex.

The leading  
Carnation Raisers  
and Specialists  
in the World.

Please mention THE GARDEN when writing

# REAMSBOTTOM & CO'S GAY GARDEN ST. BRIGID ANEMONES

(NONE GENUINE WITHOUT OUR GOLD MEDAL SEAL  
Wonderfully Improved in Form and Colours.)

FEW FLORAL SIGHTS CAN  
COMPARE WITH A GOOD  
BED OF THEM.

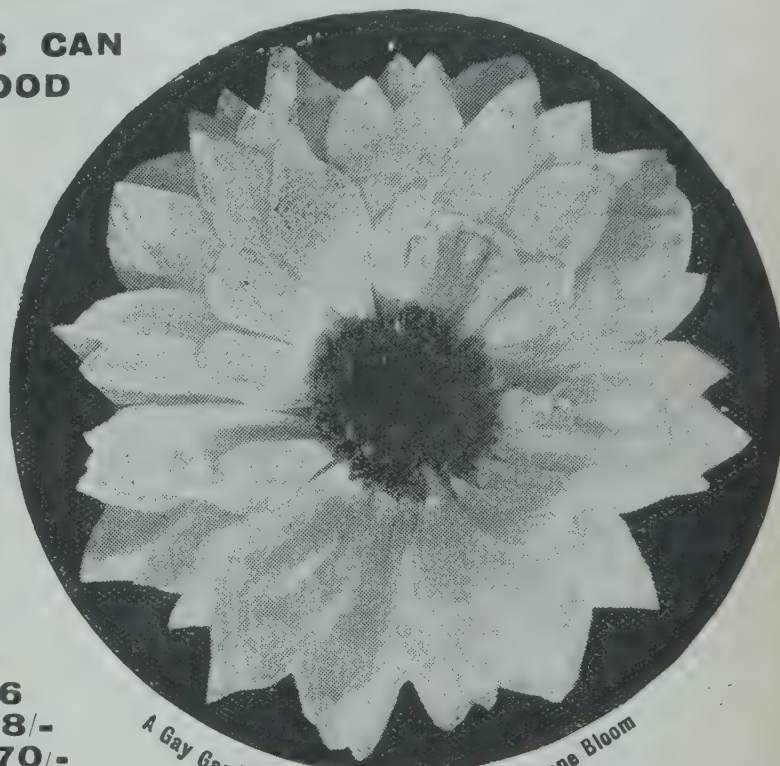
## PLANT NOW.

REAMSBOTTOM & CO.'s  
LATEST IMPROVED  
"GAY GARDEN"  
GOLD MEDAL ST.  
BRIGID ANEMONES

are the finest in the world.  
NONE ARE GENUINE WITH-  
OUT OUR GOLD MEDAL SEAL

12	..	..	..	3/-
24	..	..	..	5/6
50	..	..	..	9/6
100	..	..	..	18/-
1,000	..	..	..	170/-

Full Cultural Directions sent that  
will ensure success to every Amateur



A Gay Garden Gold Medal St. Brigid Anemone Bloom

## ALSO PLANT NOW

**LUPINUS ROSEUS** (Pink Lupins). Our glorious strain  
of these hardy perennial Lupins, most lovely shades of  
pink. 2, 1/3; 6, 3/-.

**ASTER KING GEORGE (NEW)**. Extra large-flowering  
Michaelmas Daisy; huge bluish-violet blooms, 1/6.

**LUPINUS POLYPHYLLUS**. Purple and white, 4, 1/3;  
12, 3/-.

**FRAGRANT TREE LUPIN**. White. 2, 1/4; 6, 3/6.

**PHLOX EVELYN (NEW)**. Large flowers and immense  
size, richest salmon-rose shade, an exquisite novelty, 1/6.

**RANUNCULUS ACRI FL. PLENO**. Deep golden-yellow.  
Double Buttercup. 2ft. 2, 1/9.

**RANUNCULUS**, Giant French, splendid mixture of these  
favourite flowers. 18, 1/3; 100, 5/6.

**HEUCHERA SANGUINEA**, the Coral Flower, lovely spikes  
of exquisite coral flowers, excellent for cutting. Good for  
the Rockery. 2, 1/3; 12, 7/-.

### ANEMONE JAPONICA.

Queen Charlotte, favourite pink. 2, 1/3.

Whirlwind, white. 2, 1/3.

Louise, new double white, 1/3.

Vogel (New). 1/3.

**GLADIOLI**, Mixed, glorious Autumn-flowering bulbs of  
brilliant colours. 12, 1/8; 100, 12/-.

**PAPAYER KING GEORGE** (striking novelty), bright  
scarlet, with fringed petals. 1/3 each.

**PAPAYER MAHONY**. Chocolate colour, rare. 1/6.

**GAILLARDIA GRANDIFLORA**. Our splendid improved  
extra large-flowered; choicest rich yellow, with crimson  
or brown markings. 4, 1/4; 12, 3/6.

**GENTIANA ACAULIS**. The glorious Blue Gentian,  
prized wherever a hardy flower is grown. Very dwarf.  
Likes a loamy soil, with broken stones mixed through  
it. Extremely hardy. 3, 2/3; 12, 7/6.

**PINKS, EXCELSIOR**, blush with scarlet centre. A strong  
favourite, 6, 2/6; 12, 4/6.

**MIMULUS OR MONKEY FLOWER**. Superb plant-  
flowered strain, hardy free blooming plant, covered for  
months with blotched and spotted flowers, 6, 1/6; 12, 2/9  
24, 5/-.

**BERGAMOT (MONARDA DIDYMA)**. The deliciously  
scented true fragrant Bergamot, with striking scarlet  
flowers, 2, 1/4.

**BEGONIAS**, Single Mixed. Our strain is one of the best  
in Europe. As Bedding plants no flowers can compare  
with them, as they are equally happy in sunshine or rain.  
12, 3/-; 100, 21/-.

For other varieties, also Roses, Fruit Trees, etc., please see our ILLUSTRATED CATALOGUE FREE.  
All Cash orders of 15/- value and over carriage paid or post free, packed by experienced hands. For Free Delivery,  
smaller orders, 5/-, 10/-, add respectively for Carriage or Postage, etc., 1/- and 1/9. Safe Arrival and Satisfaction  
Guaranteed.

# REAMSBOTTOM & CO.

Tower Nurseries, West Drayton, Middlesex (Also at Geashill, Ireland)

Please address to Tower Nurseries, WEST DRAYTON, and mention  
THE GARDEN when writing.

**FREE MONEY SAVING BONUS**  
COUPON. — 20 per cent.  
worth of Additional Plants FREE and  
delivered carr. paid on orders over  
15/- value if you enclose this  
coupon. — Quality  
superb — T.G.



# WAKELEY'S *Celebrated* Hop Manure

(PATENTED)  
THE ORIGINAL AND ONLY  
RELIABLE SUBSTITUTE FOR STABLE MANURE

DIPLOMA AND MEDAL, ROYAL INTERNATIONAL HORTICULTURAL EXHIBITION, 1912

## DO YOU REALISE IT?

A large bag of WAKELEY'S PATENTED HOP MANURE at a cost of only 7/- carriage paid to your door (if within 25 miles radius of London, or at a trifling extra if beyond), GOES AS FAR AS A CART-LOAD OF STABLE MANURE, without any of the defects of the latter; gives better results, is easy and clean to use.

Every ounce of Wakeley's Hop Manure is of value to the soil, supplying the necessary HUMUS in addition to the valuable plant food. Worthless rubbish is not added to make weight (as is the case of some artificial manures advertised).

Thousands do realise it, the proof of this is the constant flow of UNSOLICITED LETTERS received from time to time in praise of the wonderful results obtained at such a moderate cost (see Booklet for selection).

BEWARE OF IMITATIONS.—Genuine  
Only in Our Marked Bags contain-  
ing Guaranteed Analysis

A BEAUTIFUL FREE BOOKLET giving  
full particulars and testimonials  
sent on receipt of postcard

**WAKELEY BROS. & CO., LTD.**  
75a, BANKSIDE, LONDON, S.E.1



### CASH PRICES (including bags) :

Small (about 1 bushel) ...	3/-
Large (about 4 bushels) ...	7/-
5 Large ...	33/9
10 Large ...	65/-
20 Large ...	120/-

Carriage paid by Pickford's or to any station within 25 miles of Lon. on, including delivery if within free delivery radius of Railway Company; 6d. per bag extra for every 50 miles or part beyond. Maximum extra charge Great Britain, 2/6 per bag.

**W. TRESEDER, L<sup>TD</sup>.**

THE NURSERIES  
CARDIFF

## DAHLIAS

ASK FOR A CATALOGUE.

Please mention THE GARDEN when writing.



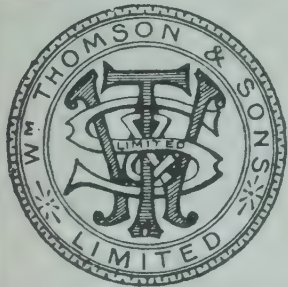
## "ACME" WEED KILLER AND LAWN SAND

Weed Killer.—Tin to make 25gals., 3/-; for 50gals., 6/-; Postage 9d. on each; for 150 galls., 15/- carriage paid.

Lawn Sand for destroying weeds and moss.—28lbs., 7/-; 56lbs., 13/-; carriage paid on 1cwt., 25/- Fertilizes the grass.

Acme Chemical Co., Ltd., Tonbridge, Kent

Please mention THE GARDEN when writing.



## UNRIVALLED FOR ALL GARDEN CROPS THOMSON'S CELEBRATED MANURES

The result of over 50 years' practical experience in Gardening; still first for quality and results. Safe, sure and lasting.

Ask your Seedsman for "Thomson's"

Prices: Vine, Plant and Vegetable Manure—a Perfect Food—1 cwt. 30/-; 56 lbs. 16/-; 28 lbs. 9/-; 14 lbs. 5/-; 7 lbs. 3/-; tins 1/3 and 9d. Special Topdressing Manure—an excellent stimulant—56 lbs. 17/-; 28 lbs. 9/6; 14 lbs. 5/6; 7 lbs. 3/-; tins 1/6

Carriage paid on 28 lbs. and up. Write for free booklet

Sole  
Make:s:

**Wm. THOMSON & SONS, Ltd., TWEED VINEYARDS, GLOVENFORDS, SCOTLAND**



## OLD WORLD GARDEN ORNAMENTS IN SOLID BATH STONE

SUNDIALS  
GARDEN HOUSES  
WALLING STONE  
OIL JARS.  
ROCKERY STONE  
CRAZY PAVING

ASK FOR  
DESIGNS &  
ACTUAL  
PHOTOS  
LARGE STOCK  
KEPT  
PHONE  
COMBE DOWN,  
8

THE  
**HORSECOMBE QUARRIES**  
AND  
**STONE WORKS**

(A.F. WILKES, F.R.H.S., PROPRIETOR)  
**COMBE DOWN, BATH.**

HIGHEST  
AWARDS.  
AT  
R.H.S. SHOWS.  
BEAUTIFULLY  
WEATHERED  
STONE  
WIRES.  
WILKES,  
COMBE DOWN  
8

BIRD BATHS  
DOVE COTES  
BALUSTRADING  
PERGOLAS  
LILY PONDS  
SEATS, ETC





## Laxtons' Strawberries

**CHELSEA SHOW.**

ALL THE NEW VARIETIES are exhibited. **Stand "U"** in the ORCHID TENT.

**LAXTON BROTHERS,**  
NURSERIES, BEDFORD.

**CHELSEA FLOWER SHOW.**

## STORRIE'S HARDY SCOTCH-GROWN PLANTS

are famed for their fibrous roots, but **Storrie's** **AQUILEGIAS, AURICULAS, COWSLIPS, POLYANTHUS, etc.,** must be seen in bloom to be enjoyed. Participate in this joy by visiting our Group of above at Chelsea Show—Tent 1, Group 44—or failing, send for Catalogue.

**STORRIE & STORRIE**  
(Of Tiny Seedling) **Glencarse, Perthshire.**

## CARNATIONS ROSES and ORCHIDS

*At Chelsea Show.*

Those who cannot go should write for our Catalogue of **Perpetual Carnations for Bedding**, which bloom a month earlier and two months later than the old varieties. Now is the time to pot on for **Winter Blooming** under glass. Look out for the best of all, crimson, clove-scented Carnations—**"Philip Sassoon," "Mauve Queen,"** and **"Lady Hindlip"** This year's novelties.

**STUART LOW & Co.,**  
BUSH HILL PARK, ENFIELD, MIDDLESEX.

## A MOST INTERESTING BEDDING PLANT CATALOGUE

*Free and Post Paid*

This Catalogue, nicely produced and well printed, contains a valuable host of useful hints on Bedding. Herein will be found all the best and most popular Bedding Subjects for all purposes. A feature has been made of interesting chats on Annuals, etc., in fact, it is a useful List which should be in the hands of all those who possess a Garden, large or small. Write for your free copy now while the matter is fresh in your minds.

ESTABLISHED 1785

*Awarded 86 Gold Medals.*

**KING'S ACRE NURSERIES, Ltd.**  
**HEREFORD.**

## J. CHEAL & SONS LTD. are showing at CHELSEA specimens OF LANDSCAPE GARDENING

New gardens designed and laid out.  
Old gardens re-modelled and improved.

## ORNAMENTAL TREES & SHRUBS

Of which a large stock, healthy, well grown and in great variety, is to be seen at Crawley.

## HARDY FLOWERS & ALPINE PLANTS

For Borders, Rock and Wild Gardens.

## DAHLIAS

The unique collection grown at Crawley includes all leading varieties.

FOR CATALOGUES AND PARTICULARS APPLY TO—

**J. CHEAL & SONS LTD., THE NURSERIES, CRAWLEY.**

## DOWNER'S USUALLY "SILENT" LUPINS

WERE NOT SHOWN AT CHELSEA AS  
ORIGINALLY INTENDED, BUT THEY CAN  
BE SEEN IN ALL THEIR FULL BEAUTY

AT

Drayton Manor Farm or Nursery, near Chichester



You can destroy weeds with Weedicide—clear the garden paths, drives, etc., and do it quickly with the weedkiller that has been "Highly Commended" by the Royal Horticultural Society.

## COOPER'S WEEDICIDE

1 gall. (price 9/-) dilutes to 100 galls. water; the cost of the ready-for-use weedkilling mixture is, therefore, just over 1d. per Gallon.  
1 pt. tin 2/-; 1 qt. 3/3; ½ gall. 5/6; 2 galls. 17/-; 5 galls. £1/18/6

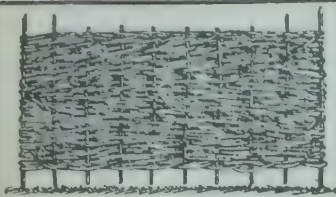
**HERCULEAN LIQUID WEEDKILLER**  
is equally efficient but half the strength (1-50 parts water)  
Pt. 1/8; Qt. 2/9; ½ gal. 3/9; 1 gal. 6/-; 2 galls. 10/6

**HERCULEAN POWDER WEEDKILLER**  
Small tin to make 12½ galls. 1/9; Medium size to make 25 galls. 3/-; Large size to make 100 galls. 11/-.

If unable to obtain from local agent, please write

**WILLIAM COOPER & NEPHEWS, Ltd., BERKHAMSTED.**





## WATTLE HURDLES

6 feet long

24, 30, 36, 42, 48, 54, 60, 72 inches high  
PLEASE STATE QUANTITY

## OLDE ENGLISH WILLOW GARDEN FURNITURE



Appears as an integral part of the Garden, midst all its Shades and Shadows.

IMPERVIOUS TO SUMMER SHOWERS.

All our Prices are CARRIAGE PAID within Railway Co.'s Free Delivery Limits, England and Wales, at Prices Quoted; to Scotland plus 10 per cent. The Suite as shown, 57/6 or Chairs, 12/6 each; Tables, 15/6 each. Our New Catalogue sent on application. The Leading Authority on Rustic Work in Oak, Willow, etc., including Hazel Wattle Hurdles, Baskets, Bird Tables.

ERNEST R. SMITH & CO., Haslemere, Surrey

Please mention THE GARDEN when writing.

## BRENTWOOD MODERN DAHLIAS

Many of the best varieties were raised and sent out from here. Those who desire to have a gay garden during summer and autumn should purchase now. Prices and catalogues can be obtained from—

J. T. WEST, Tower Hill, Brentwood, Essex

Please mention THE GARDEN when writing.

## XL PUMP SET

WITH GALVANIZED WATER BARROW

SEE IT AT THE  
R.H.S. SHOW,  
CHELSEA.



Wire:  
"KINNELL,  
Boroh,  
London."

'Phone:  
Hop 362.

In any Garden this outfit is always handy. Strongly made in every detail and fitted with our well known XL Pump.

1/2-in. Lift and Force Pump, with Air Vessel, Suction Pipe fitted with Strainer, and short length of Delivery Hose with Brass Branch, Rose and Tap. Cash Price:—

10 galls.	15 galls.	20 galls.	30 galls.	40 galls.
98/-	107/9	118/-	131/6	143/-

LIST FREE.

CHAS. P. KINNELL & CO., Ltd.,  
65 & 65a, Southwark St., London, S.E.1

Please mention THE GARDEN when writing.



Please mention THE GARDEN when writing.

## FOSTER & PEARSON LIMITED

Established 1841

Please write for Estimates for durable Greenhouses, Boilers, etc., to

BEESTON NOTTS



Mr. Wiseman says:  
"There is nothing so good for the Garden."

*I always rely on these*

What Mr. Wiseman says is true. All successful Gardeners swear by the famous Stonehouse products, which enrich the soil, kill all pests, and treble the crops.

### ABUNDA

The wonder-working Plant Food for all Garden Produce. A few ozs. spread over a sq. yard just treble the crops. Large cartons, 1/- 7 lbs. 2/- 14 lbs. 3/6

### SLUG-SLAYER

Stonehouse Slug Slayer means instant death to Slugs, Snails, etc. The rain improves the action. Large tins .. 1/3 7 lbs. .. 3/-

See our Stands Nos. 95 and 96 at the CHELSEA SHOW.

*Stonehouse*

WORKS CO. (Hort. Dept. H),  
WEST BROMWICH.



Please mention THE GARDEN when writing.

## "ACME" WEED KILLER AND LAWN SAND

Awarded Gold and Bronze Medals.

Weed Killer.—Tin to make 25gals., 3/-; for 50gals., 6/-; Postage 9d. on each; for 150gals., 15/- carriage paid.

Lawn Sand for destroying weeds and moss.—28lbs., 7/-; 56lbs., 13/-; carriage paid on 1cwt., 25/- Fertilizes the grass. No other manure needed.

Acme Chemical Co., Ltd., Tonbridge, Kent

Please mention THE GARDEN when writing.

## VIOLETS.

MISS STANISTREET offers healthy young plants, selected and packed by an expert. King of the Belgians, largest deep purple single, hardy and very fragrant, 5/6 doz. Marie Louise Improved, largest deep purple double, 5/- " Lady Humbert Campbell, largest double lavender .. 5/- " Comte de Brazza, largest double snow white .. 5/- "

Also for ROCK GARDENS AND NATURALIZING.

2 each of 8 different coloured, hardy, scented Violets, in exquisite shades of rose pink, apricot, mauve, etc., very rare, 7/6, all post free.

Killaloe, Co. Clare, IRELAND.

Please mention THE GARDEN when writing.

YOU CAN ALWAYS HAVE  
BEAUTIFUL FRAGRANT  
BLOOMS BY USING

*Carmona*  
*Fertilizer*

FOR FEEDING YOUR PLANTS

1-lb. 9d. Post Free 1/3	2-lb. 1/3 Post Free 1/9	7-lb. 3/- Post Free 4/-	Bags 112-lb. 26/- Carriage Paid.
----------------------------------	----------------------------------	----------------------------------	--



If your Seedsman does not stock Carmona send your order direct to the Manufacturers—

ROBINSON BROTHERS Ltd., West Bromwich, Staffs



# New Border Carnations

**LOWE & GIBSON**  
**Crawley Down**  
**Sussex.**

OUR New Border Carnations have a world wide celebrity, and during the last three years have gained the largest number of awards and certificates of excellence of any collection in the Kingdom.

Amongst our introductions are the following well-known varieties:—

Dr. Stone                      Caliban  
 Joan Wardale (1926 Novelty)  
 John Stobart                Mary Murray  
                                       Jessie Murray  
 Mrs. Edmund Charrington  
 Lady Shackleton        Ivan Lowe  
 Sheila Gibson    Yvonne Thomas  
                                       etc., etc.

See our Exhibit on  
**TABLE "J" Large Tent.**

**GRAND YORKSHIRE FLOWER SHOW AND GALA, YORK**  
 17th, 18th and 19th JUNE, 1925.

**£750 OFFERED IN PRIZES** for groups of Stove and Greenhouse Plants, Orchids, Carnations, Begonias, Sweet Peas, Roses, Cut Flowers, etc.  
 Gold and Silver Medals for Trade Exhibits.

For Schedules, apply to—  
 ARTHUR ANDERSON, Secretary, Assembly Rooms, York

## R.H.S. CHELSEA SHOW

May 19th to 23rd.

### INTENDING VISITORS

to the above Show are particularly invited to inspect the fine group of

### RHODODENDRONS

in Tent, and also the Group of

### SPECIMEN GOLDEN YEWS

AT

ENTRANCE TO LECTURE TENT.

Exhibited by the Executors of the late

**ANTHONY WATERER**  
**KNAP HILL NURSERY**  
**WOKING    ::    SURREY**

Please mention THE GARDEN when writing.

# HERBERT'S GOLD MEDAL PINKS

All varieties figured on cover are my own raising, and can be supplied by me. Acknowledged to be the finest PINKS in the world, unsurpassed for borders or pot culture, of robust constitution, free flowering, unique colouring and delightful fragrance.

RECEIVED TEN AWARDS OF MERIT

LIST FREE

**C. H. HERBERT NURSERIES**  
 Hazelwood Road, Acock's Green, BIRMINGHAM

GREAT  
**International Show**  
 AT EDINBURGH  
 9th, 10th & 11th Sept., 1925

Application for space for Trade and Sundry Exhibits should now be made to the Secretary,  
 Donald Mackenzie, S.S.C.,  
 4a, St. Andrew Square, Edinburgh.

COUNTY BOROUGH OF STOKE-ON-TRENT  
 27th Great Annual  
**FLORAL FETE**  
 In HANLEY PARK,  
 Wednesday & Thursday, July 1 & 2, 1925

£500 in Prizes, Silver Cups, Gold and Silver Medals. Valuable Special Prizes.

New Classes. Tents lighted by Electricity.  
 Schedules on application to WM. POULSON,  
 Secretary, Town Hall, Hanley.

## FOURTH ANNUAL GREAT FLOWER SHOW KELVIN HALL, GLASGOW.

Promoted by the Corporation of the City of Glasgow in conjunction with Glasgow and West of Scotland Horticultural Society.

TO BE OPENED BY  
**THE LADY MAUD CARNEGIE**  
 (H.R.H. THE PRINCESS MAUD)

**SEPTEMBER 1st, 2nd & 3rd, 1925**

**424 COMPETITION CLASSES.**

**VALUABLE PRIZES** in addition to CUPS, TROPHIES, and MEDALS.

For Schedule of Competition Classes apply to  
**J. GARRICK KERR, Secretary,**  
 46, GORDON STREET, GLASGOW, C.1.

For Prospectus and Particulars of space available for TRADE EXHIBITORS OF GARDEN REQUISITES, SUNDRIES, ETC., apply to—  
**CECIL SOMMERVILLE, General Manager,**  
 KELVIN HALL, GLASGOW, C.3.

Please mention THE GARDEN when writing.



## GEM DAHLIAS

**COLTNESS GEM.**—Brilliant scarlet flowers produced in the greatest profusion during summer and autumn, 18 ins. high. Undoubtedly the best Dwarf Dahlia for bedding. Plants from pots, price 7/6 per dozen. Postage and packing free.

**DUNECHT GEM.**—A counterpart of the foregoing, but with yellow flowers. Plants from pots, price 7/6 per doz. Postage and packing free.

*Catalogue of Hardy Scotch-Grown Bedding Plants may be had post free on request.*

**AUSTIN & McASLAN**  
89 to 95, Mitchell St., GLASGOW

## Yes! Hydrangea Mad!! Why Not?

A fascinating and glorious feeling that gives real enjoyment to its possessor.

### THE MODERN HYDRANGEA

gives this delightful sensation and everyone can enjoy it by growing these wonderful new varieties; they are easy to grow, last longer, and are more effective in the greenhouse or garden than any other plant. The colours are a surprise and a delight, ranging from white, mauve, soft pink, rich pink, rose-pink, deep rose, salmon-pink, rosy red, clear red, blue, mauve-blue, blue on old rose, etc. Their cost is moderate compared with their great decorative value. H. J. J. has probably the finest collection in the world, and would welcome a visit or enquiries from all who are interested in Hydrangeas. H. J. J. offers his selection 12 young plants in 12 distinct named varieties for 12/6. 12 ditto large, ex 5in. pots, 25/-; 12 ditto large that will give 4 to 8 large trusses, for 50/-. Large specimens for Tubs, 15/- and 21/- each. All delivered free for cash with order.

SEND FOR CATALOGUE.

H. J. JONES, Ryecroft Nurseries, LEWISHAM S.E.13

## Unique Collection of HARDY PLANTS from SCOTLAND

Primula Littoniana, "Giant Form."

P. pinnatifida. P. vinceflora.

Meconopsis integrifolia. M. Pratti.

Omphalodes Luciliae.

See our Exhibit at Chelsea, on Table "K," of these Novelties.

CATALOGUE FREE ON REQUEST.

## OLIVER & HUNTER,

Hardy Plant Specialists,

MONIAIVE, DUMFRIESSHIRE.

## New Dwarf Single Bedding Dahlia

"COLTNESS GEM"

(Brilliant Scarlet.)

The original Stock introduced by me in 1918. Height 18 inches; no stakes required. Makes a striking bed and flowers all season until cut down by frost. The ideal plant for public parks and open spaces, also for large and small gardens.

Award of Merit, R.H.S. Dahlia Trials, 1923.

Price 10/- per dozen, post free. May Delivery

## Dwarf Bedding Dahlia, Dunecht Yellow

(NEW), Seedling from "COLTNESS GEM," same height and habit.

Price 12/- per dozen, packed and post free.

D. G. PURDIE, 6J, Waterloo St., Glasgow

## NATURE'S WAY

of displaying her treasures indicates clearly positions for planting and general indispensable plants for the Rock Garden.

At CHELSEA we are exhibiting a comprehensive collection including: VIOLAS, PHLOXES, PRIMULAS, AQUILEGIAS, ANDROSACES, CYSTISUS, DAPHNES, ROCK CONIFERS, etc., etc.

VISIT OUR EXHIBITS in Main Tent, Tables Q and V

FREDK. G. WOOD

Marsden Nursery, Ashted, SURREY

Please mention THE GARDEN when writing.

## Don't Buy Bulbs

for SPRING FLOWERING until you have seen our Special List which will be published in August.

WE SHALL BE OFFERING  
THE FINEST

HYACINTHS, TULIPS,  
DAFFODILS, NARCISSUS,  
IRIS, CROCUS, SNOW-  
DROPS, SCILLAS, etc.

AT THE

LOWEST PRICES  
consistent with quality

Send us your name and address  
and the list will be forwarded as  
soon as ready.

## LONGSTAFF & SONS

(F.R.H.S.)

Bulb Growers, Importers and Merchants

Near CHELSFIELD STATION, Kent

Please mention THE GARDEN when writing.

## GOLD MEDAL FOR DAFFODILS

INTERNATIONAL SHOW HAARLEM  
1925

THE WELSH BULB FIELDS, ST. ASAPH

Please mention THE GARDEN when writing.



### ROCKRAVEN GARDEN STONE

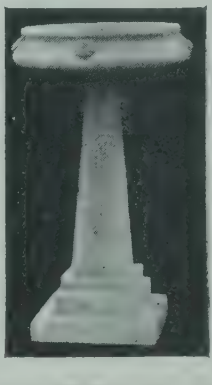
COMPANY SUPPLY POROUS LIME-  
STONE ROCKS FOR ALPINE SUBJECTS:  
WEATHER-WORN BY THE STORMS  
OF CENTURIES INTO DELIGHTFUL  
POCKETS, LEDGES AND FISSURES.  
VARIED SHAPES AND SIZES

APPLY: SECRETARY,  
LINTON-IN-CRAVEN, SKIPTON, YORKS

Please mention THE GARDEN when writing.

## YOUR GARDEN —A Bird Sanctuary.

INVITE the Birds into your garden and they will board themselves off your garden pests and give you constant entertainment with their pretty ways. They like a Bath (it need not be h. and c.).



### "SHAFT" BIRDS' BATH

Height 2ft. 8ins.  
Diameter 16ins.

Price £2:5:0

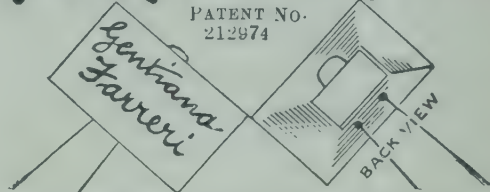
Catalogue (No. 4a) of Nesting  
Boxes, Feeding Tables and Baths  
for wild birds; also Sundials,  
Vases, and all Garden Ornaments,  
post free.

ARTHUR H. MOORTON, Ltd.,  
60, Buckingham Palace Road, S.W.1.  
(Opposite Grosvenor Hotel).

Please mention THE GARDEN when writing.

## The WIZARD Plant LABEL

PATENT No.  
212974



Made in Red Pottery, 2 1/2 x 1 1/2 ins., with rustless wires,  
12 in. 2/- doz.; 7 in. 1/7 doz. 1 1/2 x 1 in. with wires 6 in.,  
1/4 doz. For tying on. 1/6 and 1/3 doz. Waterproof  
Ink, 9d. and 7d. bot. Crow Quills, 2d. Postage extra.

Highly commended by the R.H.S. at Wisley.

E. TORKINGTON . NEW HALL . MAIDENHEAD

Please mention THE GARDEN when writing.

## WM. ARTINDALE & SON, NURSERYMEN — SHEFFIELD

Winners of the

SIR ALBERT STEPHENSON SILVER CUP AT THE  
SOUTHPORT FLORAL FETE FOR GLADIOLI

—CATALOGUES ON APPLICATION—

Please mention THE GARDEN when writing.

## YARD LONG GIANT SWORD RUNNER BEAN

The Most Wonderful Runner Bean in the World, one pod  
enough for one person.

40—1/6, 80—2/3, 120—3/- 200—5/-

BIVEN FREE WITH ALL ORDERS—Packet of Golden  
Galloon Prize-Winning Onion Seed. Onions grow 2-5 lbs.  
in weight. Also packet of Spiral Brussels Sprouts Seed.

H. GALE, King's Somborne, HANTS.

Please mention THE GARDEN when writing.

Will you send your orders for  
Garden, Farm and Sports

## NETS

to the  
Blinded Soldiers of St. Dunstons?

TENNIS NETS AND BOUNDARY NETTING, GOLF DRIVING NETS, FRUIT  
NETTING, RICK NETS, PIG AND POULTRY NETS, HAMMOCKS, ETC.

For particulars and price list please apply:

NETTING DEPT. (T. G.), Headquarters of St. Dunstan's  
Work, Inner Circle, Regent's Park, LONDON, N.W.1.

Please mention THE GARDEN when writing.



## Cutbush's Gold Medal Dwarf Perpetual-Flowering Polyantha Roses.

THE PLANT FOR EVERY  
GARDEN.

STRONG PLANTS FOR AUTUMN  
PLANTING from 12/- per DOZEN.

### NEW SORTS.

**ORANGE KING**, the extraordinary  
orange-coloured sort

each 2/-; per doz. 21/-

**SALMON QUEEN**, very bright salmon

each 2/-; per doz. 21/-

Please ask for Descriptive List, post free

**WM. CUTBUSH  
& SON, LTD.,**  
Barnet Nurseries.  
**BARNET, HERTS.**



By Appointment.

Please mention THE GARDEN when writing.

## New Salvia Splendens



Salvia Splendens, "Harbinger."

### "HARBINGER."

As the most brilliant of all bedding plants the Salvia well deserves its pride of place. A certain tardiness to come into bloom and a paucity of flowers in some varieties have been drawbacks, but these are quite overcome in the novelty we now present. The plants we offer will commence to produce in profusion their long spikes of dazzling bright scarlet flowers in June and maintain a blaze of colour until the frosts. A more magnificent subject for summer bedding can hardly be imagined. The plants are dwarf and compact in habit, and the strong dark foliage forms an effective foil to the vivid hue of the flowers. We consider this one of the finest novelties that we have introduced. Each 6d. 6 for 2/9 12 for 5/- 100 for 35/-

## —ANTIRRHINUMS—

NEW & CHOICE NAMED VARIETIES

— IN —

SEMI-DWARF, TALL & TOM THUMBS.

Write for 1925 List of these and  
other Summer Bedding Plants.

**C. S. DANIELS & SON,**  
**WYMONDHAM — NORFOLK.**

Please mention THE GARDEN when writing.

**GOLD MEDAL**  
R.H.S. :: 1925.

## Daffodils Daffodils

Before placing your order for the  
Autumn, send for my new

DESCRIPTIVE CATALOGUE  
Just published.

Therein you will find full particulars  
of all the choicest varieties and all are

**HOME GROWN BULBS**

We invite all enquiries on  
**THE DAFFODIL.**

For Awards see R.H.S. report.

Catalogue post free on application to  
**J. LIONEL RICHARDSON,**  
Prospect Gardens,  
WATERFORD, IRELAND.

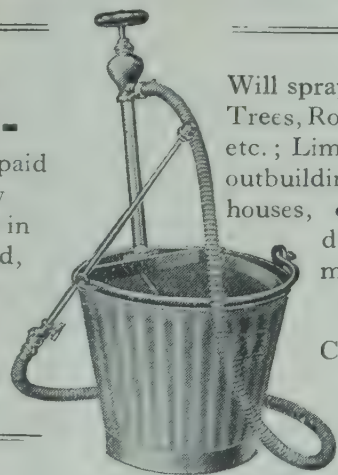
A Machine which  
will be found in-  
valuable in every  
Garden and on every Country Estate



## A FOUR OAKS SPRAYING MACHINE "Farmer-de-Luxe" Model

Price  
**68/-**

carriage paid  
to any  
address in  
England,  
Wales,  
Scotland  
or  
Ireland.



Will spray your Fruit  
Trees, Roses, Shrubs,  
etc.; Limewash your  
outbuildings, poultry  
houses, etc.; wash  
down your  
motor car,  
etc., etc.

Can be used  
by a lady.

We make hundreds of models for all purposes.

Complete Catalogues of FOUR OAKS SPRAYERS  
free on application to the Sole Manufacturers:

**THE FOUR OAKS SPRAYING MACHINE CO.**  
**FOUR OAKS WORKS, Sutton Coldfield, BIRMINGHAM**  
W. C. G. LUDFORD, Proprietor.

Telegrams: "Sprayers, Four Oaks." Telephone: 305 Sutton Coldfield

Please mention THE GARDEN when writing.



## McDOUGALL'S PERFECT SAFETY WEEDKILLER

Keeps paths and drives free from unsightly  
growth.

Being entirely free from poison its use does  
not involve the slightest danger to children  
or domestic animals, or any fear of poison-  
ing poultry, game, etc.

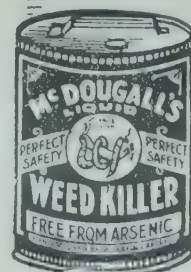
Pint tins ...	1/6	1 gall. drums	6/6
Quart " ...	2/6	5 " "	25/-
1/2 gall " ...	4/-	40 " casks	£7/10/-

1 pint Weedkiller to 3 gallons water.

Sold by  
Nurserymen, Seedsmen,  
Ironmongers, etc.

If you have any difficulty in obtaining  
apply direct to:-

**McDougall & Robertson, Ltd.**  
**BERKHAMSTED, Herts.**  
(formerly of Manchester.)







# BUNYARD'S IRISES

Gold Medal, Chelsea, 1922 :

Gold Medal, R.H.S., 1924 : :

Silver-Gilt Medal, Chelsea, 1923

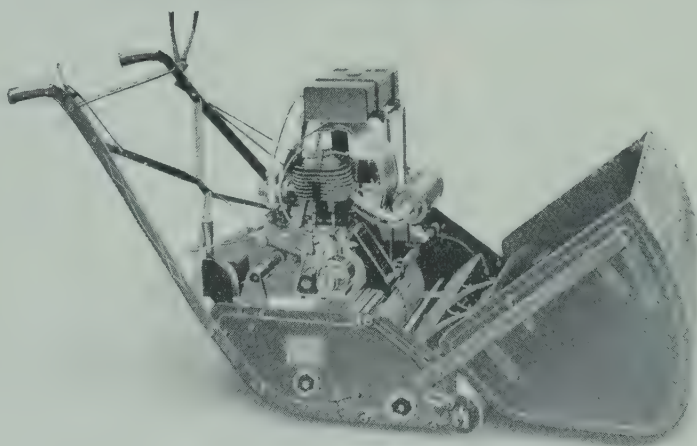
Silver Cup, Chelsea, 1924 : :

Looking back we find that we were receiving Awards for Iris so long ago as 1895, but the above are some of those recently made for our Famous Iris and give an idea of the high standard of our collection. However, a far better way of appreciating this is to **visit our Nurseries during May**, when the Iris may be seen in full bloom and the great variety and vigour of our plants will be their own recommendation. We should be glad if intending visitors would advise us so that we can arrange for an Iris expert to be present. Our Catalogue containing all the best varieties will be sent post free. The accompanying figure illustrates *Souv. de Mdm. Gaudichau*.

Geo. BUNYARD & Co., Ltd., MAIDSTONE

## DENNIS

MOTOR LAWN MOWERS



ARE MADE BY

**DENNIS BROS. Ltd.,  
GUILDFORD**

*Makers of the famous lorries, buses and fire engines*

PRICES :

24in. £75

30in. £90

Trailer Seat  
attachment  
£7 10 0

*Delivered to any railway  
station in Great Britain,  
and less 5 % for cash  
within seven days.*

May 9th, 1925,  
Royal Gardens,  
WINDSOR.

TO MESSRS. DENNIS BROS., LTD.,  
GUILDFORD.

Sirs,

I am very pleased with the 24in. Dennis Motor Lawn Mower delivered to the Royal Gardens, Windsor Castle, in March of this year. This was ordered on the strength of the excellent work done throughout last year by the 30in. model, and the new machine is giving the same complete satisfaction as the larger one.

Officials from another department have been interested by the work done by the above motor mowers, and I understand have placed orders for one or more machines.

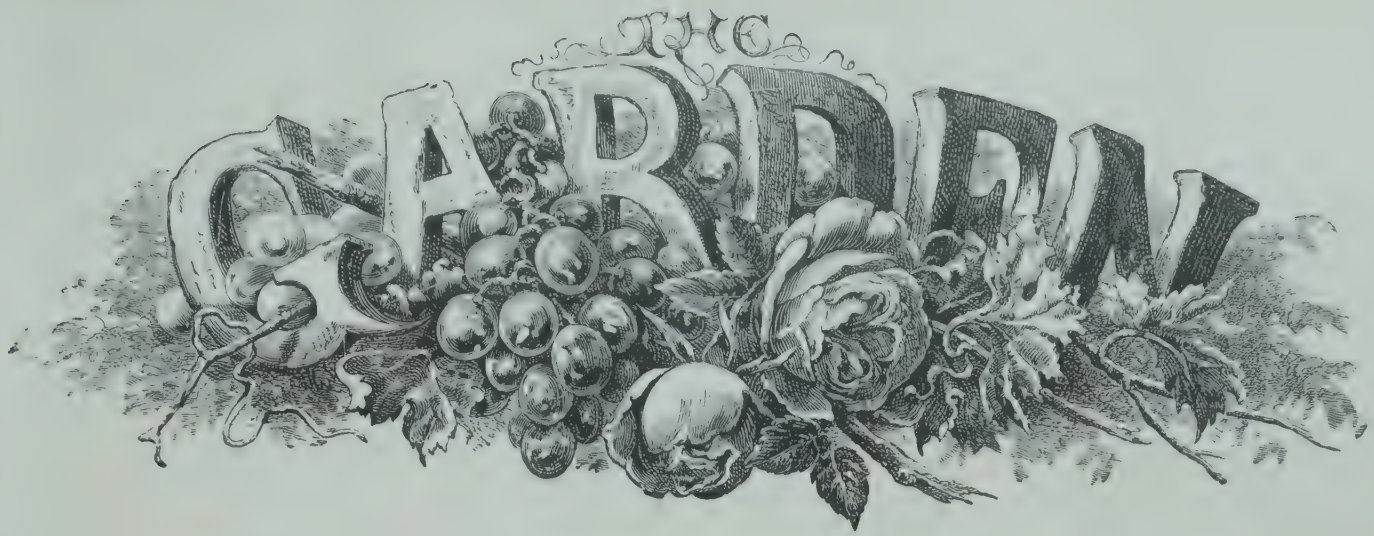
I cannot speak too highly of the Dennis, as I consider it the best Motor Lawn Mower on the market.

I am, Sirs,

Yours faithfully,

(Signed) C. H. COOK,  
Head Gardener to H.M. The King.





Vol. LXXXIX.—No. 2792.

MAY 23, 1925

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
*Editorial Offices:* 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. *Offices for Advertisements:* 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
Entered as Second-class Matter at the New York, N.Y., Post Office.



A BLAZE OF AZALEAS BY THE WATERSIDE AT LEONARDSLEE. THESE ARE AMONG THE BEST SHRUBS FOR THE WOODLAND.



# THE POPULARITY OF ROCK PLANTS

THIS ARTICLE DESCRIBES A FEW SUBJECTS WHICH SHOULD BE USED AS THE FOUNDATION OF ALL COLLECTIONS OF ROCK PLANTS.

IT is not my intention, certainly not my desire, here to invoke a flood of correspondence as to what plants should be included in the "best dozen" or "best hundred," for this or that purpose. Also I hope to steer clear of comparisons, which are often not less odious in the garden than elsewhere. But there are a number of plants which stand out pre-eminently among their fellows, plants which have now made their way and hold their positions as established front-rankers, not only on account of their peculiar beauty of form or colour, but also because of their ease of culture and adaptability to any average conditions. They are everybody's plants, the

indispensables, yet often enough but feebly represented in gardens whose owners are spending their precious time, energy and money on subjects which, if not less worthy, certainly yield smaller dividends in all that a garden means.

*Viola gracilis* I would place high up in any list of plants that matter, for its elfish grace is as sweet as its temper. You cannot play with comparisons in the presence of this unrivalled gem, and it so happens that we have growing along with *V. gracilis*, another first-rate subject, *Arenaria montana* var *grandiflora*, which riots in masses of milk-white amid the deep satiny purple of countless white-eyed *viola* blooms. There is refinement and loveliness as well as bold contrast in that informal array. There is also that realisation of permanence which is an item of hardly less importance in the stock-pot of garden happiness.

I do not know whether a taste in aubrietias is liable to place one beyond the pale in the eyes of the alpine purist—whether people who value their reputations are ever seen associating with herbs of such plebeian blood. Howbeit, to be candid, I must own up to a profound admiration for many of these abounding crucifers whose names, even of special favourites, I refrain from mentioning, partly because most of them I have forgotten. In alpine phloxes two or three well known kinds claim mention here. *P. subulata* vars. *nivalis* and *G. F. Wilson* (*lilacina*), will always fill the front seats in the best of company, and then there is a compact, mat-forming variety whose close-set, moss-like foliage is studded with little round flowers in the coolest lilac. This, I believe, is happily titled *Fairy*. It is a gem of the first water, as incomparable in its own way as the adorable *Vivid*.

*Geranium lancastriense* is a rock plant of the very highest merit, yet how seldom does one see its rose-pink, delicately-veined flowers adorning the ledges of the average rock garden. If a trifle florid, *G. Prichardii* is a comparatively new thing which is rapidly establishing itself among these indispensables, the silver touch of *Traversii* in its foliage being sufficient to rescue it from that vulgarity which the fierce splendour of its blossoms might inflict. Though I am tempted to add several more geraniums to this list, the mere mention of *G. sanguineum alba* must suffice.

*Potentilla nepalensis* Willmottæ, so brilliant in cherry-red, gold, and jet, so willing and neat in habit, might claim a foremost place in this list. *Geum Borisii* must also be squeezed in, and in flaxes a large number of claimants has to be reduced to two, viz., *Linum arboreum* and *L. narbonense*. *Æthionema* Warley Rose, positively dazzling in the intensity of its rose-carmine, stands a long way ahead of any other of its race, an ideal rock garden plant of the utmost loveliness.

*Erodium chamædryoides* has won the affection of everyone who knows it, its simple charm and sweet temper together having raised it to the distinction of being a "treasure," a position that even its lovely rose-pink sister will never be



ERODIUM CHAMÆDRYOIDES IS ALWAYS A FAVOURITE.



AUBRIETIA IS THE MOST USEFUL PLANT IN THE ROCK GARDEN.



able to usurp. Into the region of campanulas I hesitate to enter for obvious reasons, but among the better known ones the ever-delightful *C. pumila*, in one or other of its exquisite varieties, and any good form of *C. Portenschlagiana* must always rank high in any selection of this kind. *C. garganica* W. H. Paine, *C. Profusion* and *C. Haylodgensis* comprise a trio of well tried favourites that one can never be without and never need be for all are plants which anyone can grow to perfection.

*Erysimum linifolium* must always be included among the standard rock plants, and the milk-white *Hutchinsia alpina* has not, I think, a rival in subjects suited to its purpose. Again, where bolder masses of purest white are desired, can anything excel *Iberis corifolia* or a good form of *I. sempervirens*? These have never been surpassed, or, indeed, equalled; in their own way, and in their own sphere, and in colour they hold the same relative position that *Alyssum saxatile* holds among golden yellow subjects of like size and habit.

*Viola cornuta* in all its varieties is an old thing of sterling merit, whose excellent qualities we are sometimes apt to over-look these days, and another "stayer" among these bigger things is the double-flowered *Arabis albida*. In spite of their tendency in some places to develop habits a little too healthy, *Helichrysum bellidioides* and the double-flowered *Cardamine pratensis*, are both invaluable plants which need fear no rivals, and I would like to include here, as the easiest and most beautiful among the best of its class, *Omphalodes cappadocica*.

*Lithospermum prostratum*, var. *Heavenly Blue*, cannot be omitted and, bearing in mind that at least half my points are being awarded for general garden merit and usefulness, *Saxifraga Wallacei* stands head and shoulders above a host of others of its kind. So would I more willingly part with many a gallant *Pompadour* or *Red Admiral* than have to lose those neat and close-set mats of *S. moschata atropurpurea*, or *Stor-mouth's* variety of the same thing. For similar reasons I



THE ELFIN GRACE OF VIOLA GRACILIS MAKES IT INDISPENSABLE.

often have a friendlier eye for the frosty-grey cushions of *S. valdensis*, or the bristling, limy rosettes of such good tempered creatures as the more familiar *Aizoons* and one or two of those better known, medium sized members of the *Cotyledon* or *pyramidalis* set, than I have for the more troublesome, if perhaps more distinguished, scions of this enchanting race. In its own way *Veronica prostrata* (*Teucrium dubia*) is unique, a plant which in all-round usefulness stands alone among its kindred, while its beauty is beyond comparison. The golden-leaved form, var. *Trehane*, with china-blue flowers, might be bracketed with the above, for it also holds a place of notable distinction. These two, with *V. gentianoides* to make a third, belong to that goodly company of invaluable which time does not wither nor custom stale, yet not a few of us seem scarcely to realise it.

A. T. JOHNSON.

## JOHN RICHARD ANDERSON, J.P

HIS GARDEN DIARY, 1745. A NOTE BY THE HAND OF  
DION CLAYTON CALTHROP,

YOU must, if you please, keep this picture in your mind. There is a fire in Mr. Anderson's study owing to a hint of frost in the air, just enough frost to cause the logs to burn blue flame now and again. He is a man of about fifty with a face of classic mould, a Roman face not uncommon in England. His coat is wide-skirted and his wig is a bob major, ruffles of fine lace adorn his wrists and his neckcloth is from Ypres. By him on the hearthrug lies his pointer, Don, his nose on his paws, his mind in wet turnip fields where is a covey of partridges.

On a large table lie two books of manuscript neatly written in the Italian hand: the one closed is Mr. Anderson's "Bee Book," in which he has just noted "By this time your Bees sit; keep them close Night and Morning." The open book is his "Garden Book," in which he keeps notes of his parterre and garden, together with garden lore. He notes such things as the origin of the name of the Jerusalem artichoke, which is Italian and a corruption of *gir a sole*, to turn to the sun; and alongside he notes that the heliotrope does likewise, but is so called from the Greek: *helio tropos*.

"I favour the old names," he writes, "and I am pleased my gardener, James Spalding, should use them. Though in other ways he is a silent man he talks to children, animals and flowers. Yesternoon he told me five names for the Pansy to which I did add a sixth, *Pensé* for a thought, yet he would have none of it. *Herb Trinity* he calls them, and *Three Faces*

under a Hood, and *Love in Idleness*, *Stepmother*, and *Hearts Ease*. A peasant will make his Poetry out of the Earth however hard times may be. It is from him my housekeeper has the knowledge to knit stockings of three colours in wool learnt from a pedlar out of Scotland, who gave him also the country name of *Venice Mallow*, which is 'Goodnight at Noon.' A pretty conceit and true."

Mr. Anderson's spelling is not all it might be, and he likes a flourish to his capital letters, but he is a true countryman and can find his way by the stars and knows the use of simples, and grows all manner of wild things in his garden in a wilderness he keeps. Here he will have *celandine* and *shepherd's purse*, *sauce alone* and *rocket*, which he calls *dame's violet*; and he grows *balsam*, which is *touch-me-not*; and here also are *penny cress* and *traveller's joy*, which is *old man's beard* or *lady's bower*.

He hesitates whether to put down "The Cure for a Cough" in his *Bee Book* or among his *Garden Notes*. Finally he decides for the *Garden Notes*.

Told me by Mrs. Crocker (æt. 81)	To ease a troublesome cough.
Syrup of Horehound .. .. .	.. 1 oz.
,, ,, Poppies .. .. .	.. 1 oz.
,, ,, Squills .. .. .	.. 1 oz.
Clarified Honey .. .. .	.. 1 oz.

Two teaspoonfuls to be taken on going to roost, and rising, in a teacupful of warm water, or during the day if the cough be troublesome.



Among Mr. Anderson's notes are many such entries as these, cures for toothache, a mixture called "Live Long," "To make Durable Ink," "To Pot Mussels," etc. Here is one for the preparation of "Lavendar Water":

One quart of the purest rectified spirits of wine.

Two oz. of the best oil of Lavendar. (The English extract.)

Two oz. of Bergamot.

Four grains of Musk, if liked.

Half an oz. of the essence of Ambergis.

To be mixed all together and kept well corked in a warm place and repeatedly to be shaken up. It will be fit for use in a month, but if kept a year is much better. (Note. Excellent good. J. R. A.)

We may make sure that all the good man's linen lies in lavender, and that his bowls are full of pot-pourri.

Outside in his garden room, which knows the scent of tobacco and iced punch well enough, we can see him take a survey of his red-walled property with its well ordered walks all box edged, the kitchen herbs out of sight in a garden of their own, the bees humming as they work, the rooks cawing in the elms, the sound of shears as they clip the yew hedge. It is permissible here for Mr. Anderson to divest himself of his wig and wear but a silk scarf to hide his shaven head.

Mr. Anderson, as one can see from his Garden Diary, has little use for the town. "There is not," he writes, "a pair of Red Heels to be seen within ten miles of London. We have no place for them here be they on the shoes of Rakes or Dappers, Pretty Fellows or Politicians. And I wonder if I should care to see Phœbus self in Petticoats parading on the lawn. Your Beauty plucks at flowers so carelessly even to cull herself a Nosegay that she nip off the head of a rose take one sniff at it & throw it away. As for Sir Pertinax Hatton, the fellow when he paid me a visit poked about my flowers with his cane as if they grew of themselves without tending quoting meanwhile some rubbishy verses on the Dullness of the Country. 'Stap me!' the puppy said. 'I protest you are all mould here.' (Note: I gave him some French Claret which had gone a little sour telling him it was of the finest which he declared to be so. And it was good enough for any Jack-a-napes even though his father be My Lord Judge and what-not."

I read further and find great rest and refreshment in the record of this country gentleman's peaceful and orderly life, and I quote here another note of his:

Came yesterday a great lumbering fellow out of the Fens in the neighbourhood of Whaplode, a regular Gaby in a smocked frock. I was reading Juvenal when Polly, the maid, told me one Samuel wished to speak to me. Anon came this raw countryman twisting at his smock and grinning like a dead sheep. It seemed he claimed a right of coarse fishing in certain Drains as we call them and brought for his payment of fee a hare (which he swore he had found) some golden plover and an old bone box, very dirty, which he told me he had fished up.

I told him he was no better than a Poacher, at which he burst forth into lamentations as said he had been proclaimed as such, but if fish would come to his hook and hares die by his feet and plover flew in at his window what was a man to do. I rated him soundly and told him he was a bad case and that the law was made to see to such persons as he, after which I bade the maids to give him bacon and ale having called them by whistling which is a habit I have.

(Note: To cook golden plover. Captain James recipe.)

(Note: To keep flies out of your rooms in Summer place on the Sills pots of Sweet scented Musk which they utterly abhor so Miss D. L. told me, as also to place India Muslin over your outdoor meat safe against Blue-bottles.)

Mixed with these notes are Thoughts on Religion, all of the kindly charitable character which breathes through this country gentleman and flavours all his meditations. There are bird notes also, as

April 8th. The first swallow doth appear to grace the sky, anon will come plenty and as pretty a sight as winter dimmed eyes could wish for. Sea Gulls come far inland betokening foul weather at sea. They come into my garden and will eat a mess of toast keeping away the lesser birds all but the Starlings who thieve pieces from them.

April 12th. I have a thrush who works for me in my garden breaking snails upon a stone afterwards eating them and then giving praise to God from the topmost bough of a tree.

May 2nd. Come a sweet little maid to see me with a basket of eggs from my friend Lady Sarah Thorpe. Gave her a kiss and some comfits. The pretty Innocence of children is a Delight to the Heart.

I will leave these notes now and continue later with such cullings as may interest my readers.

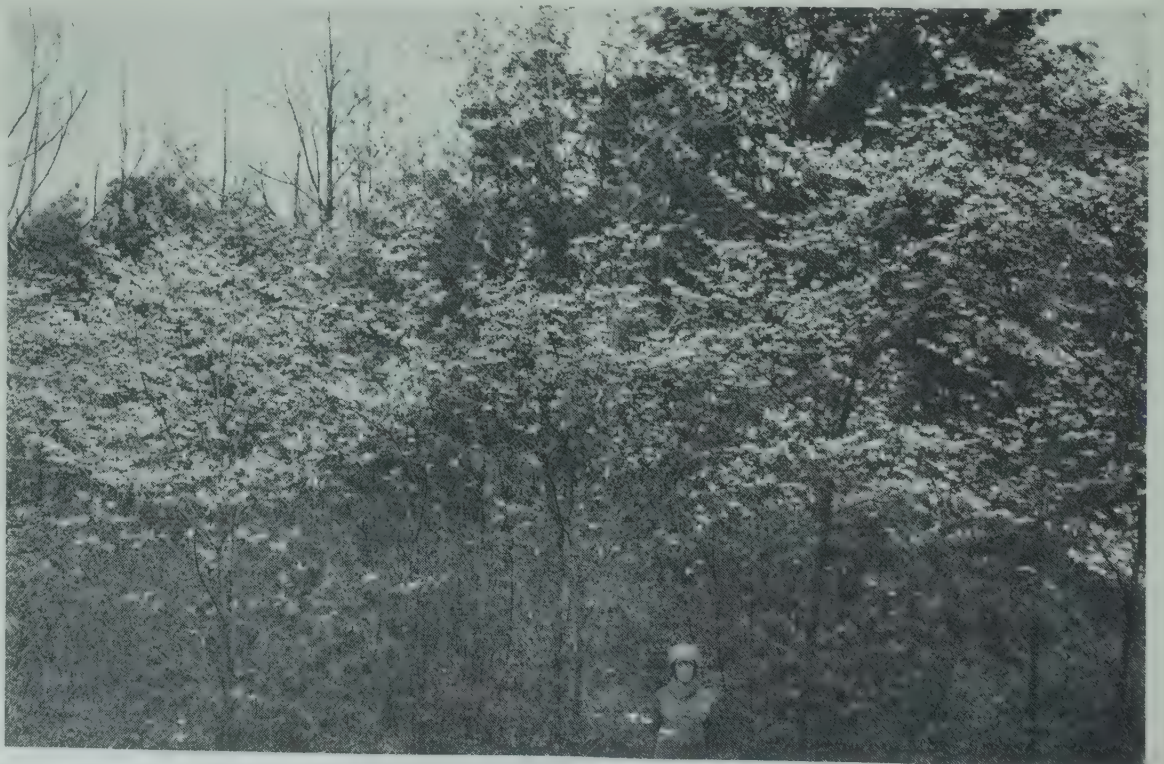
## THE FLOWERING DOGWOODS

BY E. H. WILSON (*Arnold Arboretum*).

IN the woods and copses of the Eastern United States there is no more lovely tree than the Flowering Dogwood (*Cornus florida*), the envy and despair of English gardeners. There is no more strikingly handsome flowering tree in the temperate forest of the Northern Hemisphere than the wonderful *C. Nuttallii* of western North America, sometimes eighty feet tall, with white chalice 6 ins. to 8 ins. across, so abundant as to drape the crown, and the tree stands out in the spring a gigantic surplice, in the autumn a flaming pillar in the dark forests of Vancouver Island. The bunchberries (*C. canadensis* and *C. suecica*), the diminutive brothers of these remarkable trees, are not one whit less lovely nestling on rocks and starrng with white the floor of our northern forests. These dogwoods, or cornels, with two Asiatic relatives form a characteristic group in which the flower-clusters are guarded and surrounded by large, handsome white bracts. In this group the conspicuous bracts are the floral feature and the tiny flowers agglomerated into a central button-like mass may be ignored.

To those familiar with the woodlands of eastern North America from Massachusetts southward, any description of the flowering dogwood is

unnecessary, but less fortunate folk are entitled to consideration. This dogwood is a slender tree from 15 ft. to 40 ft. tall, common as an understory in thin mixed woods of



CORNUS FLORIDA GROWING WILD ON THE MARGINS OF WOODS IN NEW ENGLAND.





A SEVENTY FOOT TREE OF CORNUS NUTTALLII ON VANCOUVER ISLAND.

deciduous-leaved trees and has a thin airy crown, flattened and often in tiers. If examined in the autumn or winter the branches will be found to be dotted with grey, rounded studs. As spring advances these swell and expand into a cross of bracts, snow-white, from 4ins. to 6ins. across at maturity, becoming stained with pink as they age and fall. So freely are the white crosses produced that the woodlands in May when viewed from vantage points are filled with seemingly floating drifts of purest white suggesting droves of white butterflies hovering and flitting amid the trees. The story of the winter's severity in New England is told by the degree of perfection of the floral bracts of *C. florida*, and its brilliantly tinted red to crimson passing to pink foliage ushers in the glory of autumn.

Not every year is this dogwood full of flowers. The trees are apt to overdo themselves and need an off year to recuperate and often, especially in Massachusetts, the winter frost may be so severe as to cripple or destroy the flowers. But in good seasons, such for instance as the spring of 1924, the blossoming of *C. florida* is an event to be classed among the floral spectacles of the world. Visitors from other lands are captivated by its beauty and yearn to possess it. One spring, it was that of 1913 if memory serves me rightly, it was my privilege to walk round the Arnold Arboretum with Sir Herbert Maxwell, distinguished by his many accomplishments and none more so than the charm of his writings on plants and gardens. Said Sir Herbert with a sigh at the close of our peregrinations, "Give me your dogwood, the rest you may keep!" But he knew full well this was impossible for since 1730 this dogwood has been known in England where efforts to grow it successfully are unavailing. Here and there a flowering specimen is known, but insufficient summer heat more than the changeful spring weather is the cause of its failure under English skies. Its exquisite autumn coloured foliage has been spoken of, but its fruit is worthy of praise. Teat-like and clustered several together, scarlet and erect it stands jewelling the branches in the fall.

The variety *rubra* with rosy red bracts is in great demand though to my mind less lovely than the type. But rightly placed, say on a slope above a pond and viewed across the waters in which its flowers are reflected, it is wondrously beautiful. Close inspection of the flowers is apt to lower the high opinion thus formed since it will be seen that the bracts are only too often more or less malformed. It is claimed that all the plants in cultivation have originated by vegetative propagation (mainly by grafting) from one individual discovered about 1880.

The related *C. Nuttallii* of Vancouver Island and south to California is a much larger tree, sometimes 80ft. high, with a heavier, elongated crown and with heads of bracts from 6ins. to 9ins. across, expanding with the leaves, similar autumn tints and equally brilliant scarlet fruits. Fortunately, this tree of marvellous beauty can be grown in the South of England where its needs are understood. It flowers freely at Kew though there is scarce a hope of its emulating its pristine glories.

These North American dogwoods have their counterparts in Eastern Asia, where two species grow wild from the central Himalayas eastward through China and Korea to Japan, but with these differences. The fruit is a conglomerate strawberry-like head and the flower-bracts unfold after the leaves expand. They are small to moderate-sized, flat-topped trees. That of the Himalayas and southern and western China (*C. capitata*), is known as the Strawberry-tree. It has pale yellow, passing to cream-coloured bracts and rather thick, leathery leaves which assume no marked autumn tints. Naturally it is tender and suited only to the climate of the Cornish Riviera and equally warm climates. The other species (*C. kousa*), distributed from Central China north-eastward through Korea and much of Japan, however, flourishes in England and is also perfectly hardy in Boston, Mass. In the Arnold Arboretum its flowers are of greater bud hardiness than the native *C. florida* and in consequence it is an even more valuable garden plant. It has this advantage in winter that its flower buds, though formed in the autumn, are folded within a pair of ordinary foliage leaves and have therefore additional protection. *C. kousa* does not flower until mid-June or later and its upstanding heads on rigid slender stalks have a foil of rich green leaves below. Thus, though these dogwoods of North America and the Orient are close relatives, they are very dissimilar as garden plants and blossoming at different seasons there is



ONE OF THE FINEST OF ALL FLOWERING SHRUBS, CORNUS KOUSA CHINENSIS.



room for both and no necessity for invidious comparisons. The floral heads of *C. kousa* are abundantly produced, from 5ins. to 6ins. across and last for more than a month and finally become pink before they fall. The form from Japan to which the specific name belongs has been sparingly in cultivation in the west since about 1860. The Central China type (var. *chinensis*) it has been my privilege and good fortune to add to gardens. In this the bracts are larger and broader and often overlap to form a closed, flattened involucre around the button-like mass of real flowers. Some experts acclaim this the finest gift of China to western gardens. Certainly it ranks high in the realm of beauty among hardy flowering trees and its fortunate introducer is proud of the opinion its merits have won for it. In the not distant future this Chinese dogwood will be in great demand.

The red strawberry-like fruits of the Oriental dogwoods are from  $\frac{1}{2}$ in. to  $\frac{3}{4}$ in. in diameter and very attractive in the autumn suspended among the vari-tinted, often vinous purple, foliage. They are edible and the orange-coloured, sweetish pulp is quite palatable, though in it are imbedded several large, hard, stony seeds.

It would seem a far cry of relationship from trees 30ft. to 80ft. tall to lowly herbs a few inches high. But a glance at the flowers shows that it is very close between the bunchberries of North America (*C. canadensis*), of Europe and Northern Asia (*C. suecica*), and the flowering dogwoods. For shaded rockeries, woodlands and sheltered nooks there are no prettier little plants than these bunchberries, howbeit rather coy of naturalisation unless they find soil and situation to their liking.

(Photographs by permission of the Arnold Arboretum.)

## FLOWERS OF TO-DAY AND TO-MORROW

A DISCUSSION OF THE VARIOUS ASSETS THAT GO TOWARDS MAKING SOME PLANTS UNDOUBTED FAVOURITES.

**A** PERENNIAL subject of discussion among gardeners involves the reasons which underlie changes of gardening fashion, and, especially, the "ins and outs" of popularity of different plants. The *style* of our gardens is necessarily influenced a good deal by the architectural character of our homes; and the way in which we lay out our gardens will, naturally, affect the kinds of material we use to adorn them. The formal parterre called for plants of little individuality, but which would give massed colour effects; the modern wild garden demands the use of kinds suited in appearance to the environment and able, if not to naturalise themselves, at least to hold their own in a plant association consisting very largely of native "weeds." Of late years, wild gardens and gardens largely composed of native plants have been coming to the fore, indicating a change of fashion on the part of certain garden lovers.

We can thus place a finger very quickly on one cause of changing flower fashions, and another and more potent cause is not very far to seek. A new "break" in any flower readily amenable to cultivation at once arouses interest, and, should the "break" prove the forerunner of a steady progressive improvement, interest develops into enthusiasm, and something in the nature of a boom sets in. Once this condition is reached, enthusiasm is likely to be maintained or even increased until the periodical improvements become noticeably less important and ultimately dwindle to insignificance.

### THE CASE OF THE SWEET PEA.

Let us consider the case of the sweet pea, which, though still largely grown as a decorative climbing annual, has lost the prominent place in gardening politics which it held but a very few years ago. The late Silas Cole noted and isolated a "freak" plant with flowers all showing greatly enlarged and wavy standards, and it was found possible to perpetuate this very elegant "freak" from seed. The waved standard, by interbreeding, was produced on flowers of various tones of colour, and year by year quite new departures were exhibited. Interest in the flower quickened and, with it, better cultivation became the rule and the possibilities of the flower came to be realised. As the range of colouring extended, moreover, folk began to talk of the possibility of golden yellow and sky blue varieties materialising. There seemed, indeed, to be almost boundless scope for improvement; and the sweet pea rapidly became a "rage." After a time, however, and when every tone of colour and every hue previously known in the flower

had been produced in flowers showing a wavy standard, and the pure yellow and sky blue varieties were still as far off as ever, it became obvious that the cycle of improvement



GODETIAS, WHICH OF LATE YEARS HAVE ATTAINED A LARGE MEASURE OF POPULARITY, ARE EXCELLENT FOR MASS PLANTING.

had almost run itself out, and interest rapidly fell away. This is hardly the place to discuss the why and the wherefore of this full-stop to progress, but the fact should be noted that, barring a natural "sport," often due to what biologists call the "dropping of a factor," there is a very finite limit to what can be produced by the hybridisation of any particular group of species, and, when once that limit is reached, only the introduction of entirely fresh "blood" can prepare the way for further advance.

The story of the rise, fall and rehabilitation of the dahlia follows the same lines, but in this case the way of advance was definitely baulked by the old-time florists, who were unwilling to let the plant demonstrate its inborn powers of evolution. Every seedling which was found wanting as a show or fancy variety (or, later, as a "cactus") was ruthlessly doomed to the bonfire. The last word was said—for a time—and the dahlia faded out of popularity. But, later on, in the hands of raisers with more catholic tastes, it has taken a higher place than ever in the esteem of gardeners. And this because the newer introductions are admirable for border decoration as growing and equally desirable as cut flowers for indoor



decoration, whereas the older exhibition types were primarily flowers of the show bench.

The sweet pea and the dahlia do not stand alone. The rise and fall might easily be traced of regal, fancy and zonal pelargoniums, of the old-time florist's pink, of the auricula, hollyhock and many other flowers. But to what end? Disease may, in some cases—as with the hollyhock—have been largely responsible for a fall from popularity; but, apart from this very natural reason, the main story is in every case the same: popularity follows new developments, and with stagnation comes a fairly rapid fall from favour.

#### THE DEVELOPMENT OF THE ORIENTAL POPPY.

Equal degrees of development do not, however, of necessity involve accessions of popularity, even when beauty of form and colouring seem on a par. Immense improvements have of late years, and until quite recently, been made in the Oriental poppy. The flower is at once showy when massed and beautiful in its colouring and the arrangement of its parts. The plant is easy to cultivate, and its blossoming time comes when flowers are none too plentiful. All this notwithstanding, the Oriental poppy has never had the vogue of the sweet pea, and it is fairly safe to say that it never will have; and this for several reasons. Oriental poppies are desirable as cut flowers only when the severed ends of the stems are treated with boiling water or an efficient styptic; sweet peas may be gathered and placed straight into water. Poppies are not fragrant; some sweet peas, at any rate, are. Poppies take a considerable amount of ground space per plant as compared with the more popular flower, and their flowering season is shorter. Yet, in my judgment, these are but minor reasons for the immense difference in the respective degrees of popularity of these two flowers during their own particular boom periods. The principal advantage of the sweet pea was that it could (and can) be *sown to flower abundantly the same year*.

A plant, to be everyone's favourite, must be capable of being flowered in perfection at short notice, and this, in practice, seems to give great advantage to plants of annual duration and to bulbous kinds, using "bulbous" in its broadest sense to include plants which lay up underground reserves and may readily be dried off and planted in that condition, whether the method of storage is by means of bulbs properly so-called, or corms, or tubers.

Bearing these facts in mind, let us now consider the probable trend of flower fashions in the immediate future. The bearded iris has had quite a run of popularity, which is likely to continue a while longer, and it can be flowered—if not flowered to perfection—the first season after planting. It is, however, most effective when massed, and the flowering season of any particular variety is not a long one. No startling new development would be likely, then, to give it the popularity once enjoyed by the sweet pea, and, in point of fact, no remarkable developments are to be expected.

#### THE PLANT OF THE FUTURE.

Very different is the case of the gladiolus, which may be regarded as *the* flower of the immediate future. One may plant corms at Eastertide and have an abundance of first-quality flower the same season, and the progress achieved with the flower since the introduction of *G. primulinus* about the beginning of the present century, has been phenomenal. The *primulinus* hybrids are wonderfully free to flower, splendid for indoor decoration and, to the best of my belief, winter-hardy in almost any part of Britain, though, owing to their rapid rate of increase, the corms should be lifted at least every second year. Their freedom to flower may be gauged by the fact that some corms will produce, in suitable soil, as many as seven flower-spikes in a single season, and one year's spawn will often blossom the next. For indoor decoration, the spikes need not be cut until the lowest flowers have faded and the spike is getting a little dishevelled. Even then, if the faded blossoms are removed each morning and the spikes shortened accordingly, they will provide most effective decorative material for some seven to ten days. By successive plantings and, to a smaller extent, on account of the habit which the corms have of throwing side spikes, they may be had in blossom from the latter part of June till the end of October, or even later. Further developments are in store for some few years yet, even if the many fine species recently introduced or re-imported



WITH THEIR LONG SEASON OF FLOWERING AND FREEDOM OF BLOSSOM ESCHSCHOLTZIAS ARE ONE OF THE MOST VALUABLE ANNUALS.



THE GLADIOLUS, THE FLOWER OF THE IMMEDIATE FUTURE.

Within the last twenty years the rise of this flower to fame has been rapid and phenomenal.



from South Africa do not allow the hybridist to produce entirely fresh and desirable breaks, which they may, or may not, do. I think, then, that we may safely predict the rise of the primulinus hybrid gladioli in the near future to a popularity rivalling that of the sweet pea at its zenith.

From the gladiolus one naturally turns to the montbretia. Great things have been done with this flower of late; yet it has not become really popular, and I do not fancy that it will. To begin with, the colour range is restricted, and, although the spikes continue long in flower, it is seldom that more than two expanded and unwithered flowers will be found at one time on one inflorescence. The plant is finest when boldly massed and seen from a distance, and from such a point of view the necessary lifting of the corms each autumn is a serious drawback.

Now, what of bulbous plants proper? The lily is a flower for the man whose very soul is in his garden. It needs real knowledge and understanding to cultivate successfully any but a few of the commoner species. All keen gardeners, then, will, as heretofore, grow lilies; but we shall see no "lily boom." The Darwin and other May-flowering tulips will continue to charm us from many a bed outdoors as well as in the conservatory and, as cut flowers, indoors; but no advance is to be looked for in this field, and they should scarcely make further headway. The narcissus is in a different case; further advance with the different sections is made manifest year by year, and an even wider popularity for this most favoured of spring-flowering bulbs may be expected. Among bulbs for cultivation under glass the freesia has shown an immense improvement during the last two decades, and its steady increase of popularity should continue yet awhile. The lachenalia, too, is rapidly doffing its workaday attire and becoming a gorgeous, as it has always been, and easy plant.

Among what are generally accepted as annuals, progress is most apparent at the moment among the eschscholtzias, godetias and clarkias, the first-named and the last being excellent for cut flower. The eschscholtzia is by far the most useful of the trio, owing to its long season of flowering and

its freedom to blossom, and its colour range is wide and still extending.

When we come to perennials, we have to note a number of very popular plants from quite dissimilar genera—a couple of geums, a brace of potentillas, an anchusa or perhaps two, a few campanulas, *Thalictrum dipterocarpum*, the double form of *Gypsophila paniculata*, and so forth. It is very probable that there will be additions to these sporadic "stars," but it is less easy to predict whence they will materialise. Of strains of flowers, the delphinium has made most progress of late, with the lupin a good second, if we except the iris, already referred to. Both larkspur and lupin may be expected to attain still greater measure of popularity; but the ubiquitous and useful herbaceous phlox seems already to be commanding less attention, and the same may be said of our old friend columbine, Latinised into *aquilegia*. There are evident signs of a revival in interest in the bunch primrose or polyanthus, though, to the best of my belief, the finest strains in existence to-day fall far short of the best of thirty years ago.

And now, as we turn to shrubs, we come to our national flower—the rose—the popularity of which none can doubt. Whether it will continue to do so depends upon the successful launching of new "breaks," and these may be expected, for the world's rose raisers are an alert set of men.

The increased popularity of flowering shrubs in general may very largely be attributed to a cutting down of costs after the war, and, as complete recovery is likely to be long delayed, the shrubs will doubtless stay long enough to be properly appreciated for their own sakes. If I might pick out a family which is likely to meet with great and greater favour, I would select the broom, with its great possibilities of hybridisation.

We may expect, then, a continuation of popularity for flowering shrubs, and particularly for the rose, and immensely increased attention may be forecasted for the gladiolus and dahlia, with very considerable accessions of strength to the bands of devotees who favour the daffodil and the freesia.

R. V. G. W.

## SOME NEW CARNATIONS

THE choice of the best varieties of carnations, both in perpetual and border kinds, depends to a certain extent on personal taste, but such points as shape of the flower, quality, splitting of the calyx, length of the stem and lasting properties are agreed upon by most people. Some prefer a variety with a good perfume, others aim at producing flowers perfect in colour and form. Many of the older varieties do not compare at all favourably with those raised within the last ten years. In colour, lasting properties and, above all, productiveness they are far behind the newer kinds. Take, for example, White Pearl. This is now quite the finest white in cultivation, and is a great improvement on other white carnations. It is not a profitable concern to continue with the same stock year after year. Stock deteriorates, and for an equal amount of labour carnations superior in quality and number can be produced if new stock is periodically obtained. It is always interesting to try new varieties, and in these notes some of the best recent introductions are mentioned.

An excellent crimson with a delightful old clove scent is Sir Philip Sassoon. The flowers are borne on stiff, erect stems and the growth is compact. Lady Hindlip is a pretty carnation which has received an award of merit. The white ground of this variety is shaded and streaked with red. Mauve Queen is quite a break in colour, being a mauve pink, but on the whole it is not a particularly good variety. Shot Silk has been much talked of recently. It is described by the raisers as an Indian chestnut, flaked and rayed deep salmon red—an unusual colour. The flowers are very good in form and the calyx is non-splitting. Butterfly surpasses the last four mentioned in perfume. This is a white carnation delicately shaded with deep red.

Cameron and Beauty of Durham are somewhat similar in colour. Cameron is a bright rosy pink, and Beauty of Durham a brilliant salmon pink. Both are vigorous in growth and good in form. A really vivid and glowing cerise is Master Michael Stoop. The flowers are large, well shaped and the calyx does not split. It is a very effective variety. Another new cerise carnation is Janet, which is of dwarf habit and has

flowers of a medium size. Red Laddie is a sport from Laddie. The red petals are shaded white towards the centre of the flower, which is borne on an exceptionally long, wiry stem. Dainty is an interesting novelty. It is an orange carnation with the groundwork heavily speckled salmon pink.

The perpetual border carnation is increasing in popularity owing to its freedom of flowering. A number of new varieties have been introduced recently, and among them are Sussex Tricolour, Sussex Flake and Sussex Ray. Sussex Tricolour has a white ground definitely striped and edged with mauve and cerise. Sussex Flake is a soft pink flaked with red. This is a strong, free-flowering variety. The striped crimson ground of Sussex Ray is attractive.

A border carnation which has a strong constitution is hardy enough to stand outside all the winter, and if it keep its foliage clean, is always sought after. It is interesting to experiment with new varieties to see if they possess those qualities. Caliban is a novelty for 1925. It is a striking fancy, the apricot ground is heavily marked with mauve and bright rose, and the flowers are of medium size. Dr. Stone is another apricot fancy with vivid pinkish red markings. Both of these are very robust. Joan Wardale is a crimson self which gained a first-class certificate last year, and John Stobart is a white and rose fancy of distinct colouring.

Several new varieties have been added to the famous collection of Douglas Cloves. Among them are Bookham Orange, Sultan and Coral Clove, all good border carnations. Bookham Orange is a vivid orange with large flowers of excellent form. Sultan is a dull orange-apricot variety, while Coral Clove has beautiful coral pink flowers borne on stiff stems 12 ins. in length. These clove carnations are especially valuable in the garden on account of their sweet fragrance.

Some new Allwoodii have been added to the list, and are worthy additions to any collection. Three of the best are Roger, a salmon pink edged and rayed maroon; Jane, a light pinkish mauve with a deep red eye; and Anne, a white with a maroon eye. Both Jane and Anne are double Allwoodii with smooth-edged petals, and are sweetly scented.



# THE GREAT CHELSEA SHOW

May 19th to 23rd

CHELSEA is so well known as the premier horticultural show of the world that it requires no introduction to our readers. Such is its importance that people come to see it from all over the world. This year the Council of the Royal Horticultural Society have started an innovation by making the Show last five days instead of the customary three. Whether this move is entirely wise remains to be seen. Certainly, as the Show is open until Saturday, it will allow many people to see it who are unable to spare the time on a weekday, but a five-day show creates difficulties for many exhibitors, particularly for those showing plants whose period of blooming is short or which are unable to stand the stuffy atmosphere of a hot tent for five days.

The freshness of the exhibits towards the end will depend more than in past years on the weather. It appears, at the time this note is written, as if the weather is going to be kind to us at Chelsea. There is general need of a month or two of dry weather, but, unfortunately, this sudden spurt of sunshine has appeared a little too late to be of much use to exhibitors; the season has been very backward generally, but it is amazing how plants have progressed considering the soaking they received last year.

As usual, the exhibitors have staged a noble show of blooms, which each year proves more and more that we have the best gardens in the world. Nowhere can be seen such a wonderful mixture of everything that is common and uncommon in horticulture.

## FORMAL GARDENS

The gardens constructed at Chelsea this year are varied in design. Some are sunk gardens, others are bounded by low walls or trellis, while several have small streams running through them, which in their setting of vivid colours look most effective. Several of the gardens, with their rocks, stream and method of planting are more allied to semi-wild gardening than formal. In a few cases the plants were overcrowded and unsuitably chosen, but on the whole the gardens were good. Tall herbaceous plants on raised beds surrounding a formal sunk garden are not in keeping, and overcrowding is a great mistake. One or two of the gardens would be found impracticable.

A glimpse through one of the two entrances of Messrs. Carters and Co's. exhibit reveals a charming sight. There is a feeling of tranquillity and harmony in this garden of rhododendrons. The large circular garden is surrounded by conifers, the dark foliage of which makes an excellent background. Varieties of rhododendrons in many shades of red and pink have been selected, and are shown to perfection in the semi-circular raised beds, which at the back form a terrace. The low retaining walls are planted with aubrietia. In the centre of the garden is a round pool, upon which dark shadows are thrown from the neighbouring trees. The

beds near the pool are filled with pink and red stocks, and a contrasting colour is introduced in vases by the planting of blue hydrangeas. The garden ornaments, too,

these plants could not bloom so freely in such close quarters and this exhibit gives a true representation of the correct planting for this type of garden. The stream wanders



MESSRS. CHEAL'S WATERSIDE GARDEN.



THE SEMI-WILD GARDEN SHOWN BY MESSRS. WALLACE.

are well chosen, and the stone seats, lead vases and two statues lend dignity to the scene.

The merit of Messrs. Cheal and Sons garden is that it is natural. It is not a blaze of colour produced by packing in tightly pot after pot of forced plants, as is the case with some exhibits. Under natural conditions

slowly through the garden, and the gently sloping grassy banks are edged with moisture-loving plants. Groups of vivid azaleas, such as J. C. Van Thol, laburnums, acers and a hedge of conifers are seen round the outskirts. At the water's edge bold clumps of trollius, funkia, trillium and the large-leaved gunnera flourish in the cool rooting medium.



One of the best of the gardens has been constructed by Messrs. Wallace and Co. It should, perhaps, have been simpler and less crowded, but the general effect is good. Alpines of many kinds are growing in the steep rockery which rises up from the two pools. A winding path passes masses of azaleas and wistarias, which gives, when the summer-house is not in view, a Japanese effect to the garden. Rhododendrons, acers and conifers form a perfect setting.

Messrs. Gaze and Co. also have a stream and a summer house in their garden. Situated at the corner of two of the avenues, this firm have a first rate position for their exhibit and they have certainly made the most of it. In the space allotted to them they have constructed a rectangular garden with a high bank at the back, at the top of which the summer house is placed. This bank is a vivid mass of colour. Oranges, purples and mauves make a striking contrast against the young, soft green leaves of the shrubs or the dark crimson foliage of the acers. A small stream, planted on each bank, runs through the garden. On one side of the

in the rock crevices, and primulas and gentians flourish exceedingly. A large patch of *Primula secundiflora* is most effective by the waterside. Acers, daphnes, spiræas and many other plants form distinct groups of colour. The summer-house (which, in the opinion of some people, is not an attractive addition) is the best position from which to view this garden.

The small rectangular formal garden bounded on the four sides by low walls has been constructed by Messrs. Maxwell and Beale. The walls rather spoil this garden. Two paths cross in the centre, and at their junction an attractive old Somerset well has been placed. The well-head is thatched.

Most effective is the anemone garden of Messrs. Reamsbottom, who have arranged the beds in such a way that their famous St. Brigid anemones are well displayed. Each colour is separated into a different bed, and against the grey of the paths and garden ornaments the bright colours give a delightful effect.

Mr. John Klinkert has a formal garden composed entirely of clipped trees in many odd shapes and designs. Mr. Klinkert excels at topiary work, and this exhibit well maintains his high standard.

The effectiveness and utility of stone ornaments, seats, vases, balustrades, sundials and even dove-cotes was well shown by the formal garden arranged by the Horsecombe Quarries and Stone Works. They have constructed a rectangular garden, and circular stone steps lead down to a sunken middle portion in which a tall stone dove-cote has been placed.

The garden exhibited by Mr. Reginald Winder is good in design, but the colouring of the flowers is too pale to be effective. The colour scheme is white, pink and mauve; had the last two shades been of a deeper tint the

garden would] have been much improved. The insipidity of the flowers is due, to a large extent, to the fading in the sun of the forced blooms, but grown outside the varieties selected would be much brighter. The dwarf polyantha rose *Ellen Poulsen*, for instance, has turned to the palest of pinks. The steps on each side of the garden lead down to a small round pool. Clipped box trees stand on either side of the steps, and the surrounding beds are filled with dwarf polyantha roses in pink and white, and an edging of mauve violas finishes the bedding. Standard White Dorothy roses are in several of the beds, and clusters of pink ramblers cover the summer-house.

Berberis and crimson-leaved acers occupy the four oval beds in the garden, and armerias and saxifrages are placed in the cracks of the sandstone walls. The double-flowered gorse in the bed just outside and on the top of the walls forms a line of bright colour, but is not suitable for a formal garden.

Messrs. Ernest Dixon and Co. have a small sunk octagonal garden which is quite pretty but in no way outstanding. The steps and shape of the surrounding raised beds

are good, but the planting might have been better arranged.

The brightest of any of the gardens is that of Messrs. R. and C. Cuthbert, which is formed only of azaleas. All the best and most effective varieties have been chosen, but unfortunately when the flowering period is over all the colour of such a garden would have gone.

The paving in the garden of the Johnstone Garden Contractors, Limited, is, perhaps, the best in any exhibit. Their garden is edged with yews and planted with hydrangeas.

Behind a fine exhibit of garden furniture by Messrs. W. Wood and Sons is a small formal garden constructed by this firm. The design is good and the garden gives a feeling of restfulness. Acacias, rhododendrons and azaleas brighten the small beds, and a comfortable summer-house adds to the appearance of the garden.

## ROCK GARDENS

Nearly all the outside rock gardens are competing for the *Daily Graphic* Cup, and offer varying treatments of the classical theme of rivulet with waterfall, bordered by grey boulders set in turf. This has become almost a set subject for the competition, and year by year it becomes more pictorial and more remote from practical gardening, which is a little disappointing for the garden owner who comes in search of new ideas. It is a pity that the judges should set, or appear to set, so high a value on scenic effect to the neglect of sound and permanent planting, for they call the tune and the competitors must tread the measure.

This year the gardens are more brilliant and pictorial than ever, though more competitors than usual have abandoned the classic theme and struck out a quiet line for themselves. Apart from those few, the pictorial effect is more impressionistic than last year, and something of the prevailing fashion for violent colours, sharp-edged and unblended, appears in the colour schemes.

The lateness of the season and the earliness of the Show have tended to limit the choice of plants in flower, so that there are more anomalies of planting than usual, and in several gardens aubrietia and fancy violas have been turned into scree plants, and lime-haters and lime-lovers been compelled to forget their differences for a week.

It is interesting to see the individuality that different craftsmen have infused into the classical theme. Messrs. Brook have reproduced a Westmorland glen, with a perfectly naturalistic waterfall, dividing into two streams which unite to form a brisk little rivulet. On one side of the glen the strata have been broken by a fault which time has converted into a turf slide in which a dwarf spruce has found a lodging. Over this landscape a jewel box of glittering colour has been poised, so that the effect close up is kaleidoscopic and opalescent at a distance. The same firm have built to one side of the rock garden a little formal garden surrounded by a low wall of mossy stones enclosing a bed of old-fashioned flowers and a fountain spurting out of an old weathered boulder which is in itself a picture worthy of a fine frame. The effect is of a very old garden coloured and softened by the tone of time.

Messrs. Hodson have poured their colour in streams down wide, flat slopes of scree between grey boulders, and they have obtained it by the use of real scree plants—*Androsace primuloides*, *Silene acaulis*, *Helichrysum bellidifolium*, etc., soft pink and white and grey. Beyond their waterfall, almost hidden in a mass of ferns, is an apricot-coloured azalea that carries the eye back into the shrubbery and gives the impression of a garden that is continuous with its surroundings. Good use is made of dwarf conifers



A PORTION OF MESSRS. BAKER'S GARDEN.

exhibit is a quaint little sunk garden, which in itself is pretty, but is not in keeping with the rest of the garden.

A garden which, as it stands, would be an eminently suitable design for a town garden, has been constructed by Messrs. Vernon Bros. It is complete in itself and with its brown, square trellis work for covering the ugly brick walls of a London garden, its lily tank, wall fountain and paved walks, it is a garden of beauty and varied interest. The centre of the garden is slightly sunk, so that each end forms low terraces. Tulips, standard fuchsias, heliotropes, myosotis and azaleas, form the chief colour in the garden; while saxifrages, aubrietia, arabis, and many other plants flourish in the crevices of the stonework.

Messrs. Bakers have a delightful garden in which both the design and planting are good. In one corner, beside a heather-thatched summer-house, a small waterfall trickles down the ledges of water-worn limestone. Gradually this water forms a small stream, which winds through the garden past boulders of rock and under a stone bridge. Alpines of all kinds bloom happily



to form a sombre little pine wood on one side of the glen.

Mr. G. Whitelegg's waterfall issues from a group of dwarf conifers weeping over a clump of pale lavender Phlox Laphami. On either side of the stream the colour is laid on in broad mosaics of magenta pink, chrome yellow and ultramarine. On one side of the garden, and round the corner, is a turfy hillside planted with buttercups and that fine old cottage-garden plant, the double lady's smock. Opposite to it is a conflagration of red and orange azaleas.

Messrs. Pulham have aimed at a much quieter effect with drifts of soft colours. A patch of dull red mossy saxifrage with white iberis and an old gold cheiranthus is alongside the delicate lilac pink of *Æthionema Warley Hybrid*. In the middle of the garden is a large grey boulder covered with silver saxifrage and a-wave with their white plumes, the silver and white and grey faintly lit up by few pink sprays.

Messrs. Cutbush have taken a very strong line with the classic theme, and their treatment of it is almost futuristic, a most interesting and unexpected development. Instead of the rounded, weather-worn boulders, their stone is sharp-edged and angular, built up into almost regular terraces which enclose masses of magenta azalea, golden *Tulipa persica* and grey-green *Allium karataviense*. The waterfall is reduced to a trickle among ferns and the mountain path is represented by the sharp angles of a crazy pavement. As a sudden concession a group of *Lewisia cotyledon* (exceptionally well grown and floriferous) harmonises in its tea-rose colouring with the warm red of the sandstone. A rare plant is *Lewisia columbianum* that contrives to look like a large, strangely pink silver saxifrage and is given the real thing as a neighbour.

Messrs. Clarence Elliott have no waterfall and make no attempt to follow the convention, but have a cliff set with curious and interesting colours. The dull magenta and grey of *Primula pulverulenta* with the soft orange of a geum, the sulphur yellow of *Primula sikkimensis* with the delicate lavender of *Cardamine pratensis* fl. pl., and a drift of *Rhododendron fastigiatum* and alyssum, gold and pale violet. In front of the cliff is a conical mountain covered with the little spires of *Juniperus compressus nanus*, which are carpeted with *Veronica repens* and *Silene acaulis saxatilis* (a really free-flowering variety). The lower slopes of the mountain are planted with *Mertensia echioides* and *Aquilegia flabellata*.

Messrs. Gavin Jones and Ingwersen have taken a line of their own and reproduced a miniature mountain pass with a steep slope on one side and a rounded shoulder on the other. The shoulder is converted into a *pré fleuri* by close planting with small brilliant alpinas, *Gentiana verna*, *Trifolium uniflorum*, *Lychnis Lagascæ* (a very pure pale pink), *Linaria æquitriloba*, a small form of *Linum arboreum* (soft butter yellow) and *Aquilegia Helenæ* in violet and white. The whole makes an iridescent blending of cool colours. The steep slope is planted with larger and bolder plants: the moonlight broom, *Onosma albo-roseum* and *Saxifraga Cotyledon caterhamensis* with its great waving plumes of pink and white.

The miniature rock gardens under cover are little pictures of concentrated brilliance in which the exhibitors have contrived, with remarkable ingenuity, to suggest the qualities and possibilities that their plants would develop in a larger sphere, and at the same time they have created this year some exquisite little works of art.

Messrs. Frederick Wood of Ashted have built up a background of subtly varying tones of green, dull gold and bronze, with dwarf conifers and Japanese maples, broken in two places by the cool colours of the smaller



THE FORMAL LOW-WALLED GARDEN OF MESSRS. BROOK.



MESSRS. JONES AND INGWERSEN'S BOULDER GARDEN INSIDE THE TENT.



A PORTION OF MESSRS. WOOD'S ATTRACTIVE EXHIBIT.



brooms, pale sulphur yellow, ivory white and the curious subdued rosy purple of *Cytisus Dallimorei*. In the middle of the exhibit is a miniature pond overhung with brownish orange mimulus and sprays of white *Saxifraga Cotyledon*, and bordered with mossy phloxes and the delicate lilac blue of *Campanula Steveni*. *Verbena chamædrioides*, which seems to be hardier than is generally supposed, is shown growing through a prostrate juniper, a situation that apparently suits its needs as well as it shows off the glowing orange scarlet of its flowers.

Messrs. Gavin Jones and Ingwersen have built up a rounded boulder at one end of their exhibit with masses of greyish purple saxifrage infiltrating its crevices and surrounding a wide mat of the greenish silver *Raoulia australis*, the whole forming a subtle harmony of colour with a restful feeling of permanence; at the other end a bold mass of golden *Tulipa persica* is grouped at the feet of the three tall conifers.

Messrs. W. H. Rogers and Sons have a large double-sided exhibit containing a blaze of Welsh poppies bringing out the value of the double orange form, which never looks so well alone as when associated with the singles, whose colour it seems to enhance.

Clarence Elliott and Co. have piled up a cliff, planted with rock rhododendrons and *Daphne petraea*, overhung by pink clouds of *Saxifraga Cotyledon*, with at one side a juniper hill rising austere out of a brilliant alpine lawn. A "pretty conceit," as Parkinson might have said, is a single specimen of a minute, very deep pink form of *Primula farinosa* set like a jewel in the middle of a round silver plaque of *Raoulia australis*.

Messrs. G. H. Crow show how many colours the rock garden can produce by massing together every imaginable shade, from the black of Bowles' viola to the crushed strawberry of *Malvastrum Monroanum*, into a glittering tapestry.

Messrs. Waterer group lady's slipper orchids, in rose and white and golden brown under copper-coloured Japanese maples, and surround them with a carpet of violet wahlenbergias, mossy phloxes and pale pink daphne.

Messrs. Tucker of Oxford carry up their garden higher than most with tall spires of delphiniums and white lilies. Alongside them the moonlight broom comes spraying through the dark branches of a dwarf spruce.

## TREES AND SHRUBS

Shrubs are as well represented as ever. Luckily, this fine spell of warm weather has brought on plants which would otherwise be unrepresented. The grouping on these stands is a noticeable feature which seems to improve yearly.

Messrs. Waterer, Sons and Crisp are again staging their fine rhododendrons and azaleas. Among them is the sport from Pink Pearl called Mother of Pearl. There is, no doubt, a great future for this fine rhododendron. The truss is about the same as that of Pink Pearl, but the texture is a little firmer, while the colour is a beautiful white, which is set off by the rose-coloured stamens. Another good hybrid is Starfish, a good pink with darker rose-coloured buds. The petals are reflexed and the truss looks straight at one. We are glad also to see a fine show of *Azalea Kämpferi* on this stand. This azalea, with its terra-cotta flowers, is perfectly hardy and should be far more grown than it is at present.

Messrs. Koster and Sons are staging a fine exhibit of their famous hardy hybrids. Among the most noticeable are Mrs. Lindsay Smith, a particularly pure white, faintly tinged with yellowish green at the throat and with a few greenish spots on the upper petal. Miss Noreen Beamish is a clear rose without markings, while Rosamund

Millais is a good carmine with very dark leopard markings on the upper petals.

Messrs. Cuthbert are showing a large exhibit, in the main tent, of their hardy azaleas. This includes nearly every class and proves the worth of these most useful plants. Mollis Comte de Gomer is a fine salmon orange of nice free habit, while one is glad to see the fine *Azalea Daviesii* with its pontica blood in it. The smallish flowers are carried in good trusses and are white tinged with yellow on the upper petals.

The Executors of the late Mr. Anthony Waterer have a large stand of his famous strains of hardy hybrid rhododendrons. With the exception of two all of the plants shown were raised at Knaphill. Such old favourites as B. de Bruin, still one of the finest of crimson hybrids; Sappho, a fine upstanding conical truss of white flowers with a deep purple blotch on the upper petals, and so on. This strain is famous for its absolute hardiness and, although



THE MAGNIFICENT CRINODENDRON  
HOOKERI, SHOWN BY MR. REUTHE.

some of the newer hybrids have larger flowers, yet few can vie with these old favourites in free flowering year after year.

Messrs. L. J. Endtz of Boskoop are showing a few hybrid rhododendrons and some fine azaleas. Among them is a magnificent new Mollis  $\times$  sinensis called Alma Dyke. The colour is terra-cotta orange. Another good terra-cotta colour is that of Baheuf, another mollis  $\times$  sinensis seedling. This firm is wholesale, and does not cater for the retail trade.

Messrs. Cheals are showing a fine exhibit of ornamental and flowering trees and shrubs. The main theme is *Acer palmatum* var. *atropurpureum* and *laburnums*. These are two plants particularly useful for grouping together, as the fine dark leaves of the acer show off the yellow of the laburnums exceedingly well. Lilacs, rhododendrons, azaleas and *Cytisus* are also prominent.

Mr. Reuthe's exhibit is most noticeable for three very fine plants of *Crinodendron Hookeri*. These are so fine that they stand

out among all the fine plants at Chelsea. The pendent scarlet drupes are thick on a shapely bush about 7ft. in height. Unfortunately, this plant is scarcely hardy. Other plants on Mr. Reuthe's stand are azaleas, *Kalmia latifolia*, brooms, *enkianthus* and numerous rhododendrons, among them *Lindleyanum*, *Keysii* and *campylocarpum*.

The Donard Nursery Company are exhibiting ornamental and flowering trees and shrubs. Among them are fine plants of *Ilex Pernyii*, *I. Fargesii*, a very handsome evergreen with narrow leaves about 4ins. long which might be more often seen; and *Lomatia pinnatifolia*, a fairly hardy evergreen with leaves cut like a fern.

Mr. Lewis of Hanwell is staging standard and bush hybrid rhododendrons in a good and well grown assortment.

Mr. Notcutt is again showing his well known standard *Cytisus*, including Donard Seedling, Daisy Hill splendens, Osbornii, along with various maples, lilacs and weigelas.

Along with lilies and irises, Messrs. Wallace are showing many well grown hybrid rhododendrons, such as White Pearl, Ascot Brilliant, N. N. Sherwood and Armistice Day. All the hybrids on this stand are perfectly hardy and will stand full sun.

Messrs. Hillier are staging a fine exhibit of shrubs. It is pleasant to see *Viburnum macrocephalum*, one of the finest of all the sterile viburnums and invaluable for an inside wall in a cold house. The main exhibit consists of hydrangeas of various forms, *Cytisus* and *wistaria*, with a sprinkling of retarded *Prunus* and *pyrus*, among them *Pyrus Malus Sargentii*. A number of rare shrubs are to be seen on this stand, such as *Daphne caucasica*, an old introduction but now rare in cultivation, *Fothergilla major* and *Prunus Padus grandiflorus*.

Mr. Slocock has a good exhibit of hardy hybrids, among them the rhododendron and azalea cross of creamy yellow called Broughtoni aureum, Goldsworth Crimson (a fine upstanding hybrid) and some new Aucklandii and decorum seedlings are also shown.

The Yokohama Nurseries staged their usual exhibit of trained and dwarfed trees together with azaleas.

Messrs. Robert Green, outside the tents, are exhibiting their collection of trained bays. For all who want hardy trained trees, these are admirable, whether in plain clipping or those with spiral stems.

Messrs. Charlton are staging a large exhibit of hardy shrubs. This firm specialises in various forms of maples, and their specimens, whether cut-leaved, variegated or coloured, are all well grown. They also show *Lavender Stæchas*, a curious plant with flowers in rows forming a quadrilateral, and large violet bracts coming out at the top. It comes from the Mediterranean and is not over-hardy.

In addition to their other exhibits, Messrs. Cutbush have a most excellent collection of clipped boxes and yews. Whether in plain shapes or in birds and animals, they show good cultivation, while the clipped box fence is both novel and attractive.

Messrs. Fromow's collection of maples requires no introduction. Their variety in shape and form and colour of leaf is endless.

Mr. G. Whitelegg, along with his alpine, stages azaleas and broom.

Mr. Charles Turner shows white greenhouse rhododendrons, such as Purity, Exoniensis and Beadonii, obviously with Nuttallii blood in it, owing to its long trumpet. On another stand he is staging lilacs, which are not so far advanced this year as last. Among the best are Charles Joly, a beautiful semi-double of deep claret colour; and Princess Marie, also a semi-double rose-lilac of a good shade.

Messrs. Watsons of Dublin are showing a fine new seedling broom called Dorothy Walpole. The colour is pure, but difficult to describe. It might be called dull crimson.





A CLIPPED BOX FENCE SHOWN BY MESSRS. CUTBUSH.

Messrs. Russell have an outside exhibit of hardy and semi-hardy shrubs, such as maples, pittosporums and olearias. They also show a number of ornamental vines, including those fine species, *Vitis Henryana* and *V. heterophylla*.

Messrs. Gill stage a number of tender and hardy rhododendrons. Their form of *R. Falconeri* is particularly fine, with a larger truss than is usually seen. Among others are *Dalhousiae*, Cornish Cross and Beauty of Littleworth, one of the best white hybrids in existence.

Messrs. Harrods are exhibiting a collection of clipped trees for formal work.

## LILIES

As was the case last year, Messrs. Wallace of Tunbridge Wells are almost the only firm exhibiting these flowers. The oval group in the centre of their exhibit comprises *Lilium longiflorum* var. *formosum*, whose large and beautiful white blossoms override the dwarfier varieties of the *umbellatum* and *Thunbergii* sections. *L. Brownii*, with its handsome blooms so characteristically streaked with brown on the back of the segments, and *L. regale*, which truly deserves its specific name, with its nodding flowers tinged with gold in the throat and the bright yellow anther heads, call both for attention and admiration. *L. regale* undoubtedly is one of the lilies of the immediate future. The tall and handsome *L. excelsum* is also present, set off to advantage by a dark background of *cupressus*. A patch of brighter colour is supplied by the judicious placing of plants of *L. umbellatum splendidum*; while Orange Queen, of the *Thunbergii* section, supplies a lighter tone. A variety of which there are only a few plants is Golden Fleece, belonging to the *umbellatum* series, and it is worthy of attention. *L. Martagon dalmaticum* is as beautiful as ever, both in the unopened and full out conditions, with its reflexed flowers of a pinkish tinge. One of the most interesting species in the group is *L. Farreri*, whose elegant and pendent white blossoms are so quaintly marked with spots of a bluey mauve tone. A no less beautiful and decorative half-hardy species is *L. Krammeri*, so called after its discoverer. Like *L. longiflorum*, it carries large flowers, the perianth segments of which are of a delicate shade of pink overlying white. Unfortunately, unless given a very sheltered

spot it does not thrive outside. Another graceful species which cannot fail to be admired is *L. Willmottiae*.

A few plants of *L. longiflorum* var. *formosum* are staged by Messrs. John Peed and Son in their exhibit of greenhouse subjects. These are well grown and carry many large shapely blooms of pure white with the slight tinge of green in the throat so characteristic of this species.

Messrs. Bunyard of Maidstone also stage a few groups of *L. longiflorum* var. *formosum* and *L. regale*, which give a pleasant contrast with the blues of the irises, the main feature in their stand.

## CLEMATIS

As in the past, Messrs. George Jackman and Son provide one of the most interesting but by no means less beautiful features of the Show by their excellent exhibit of all the leading varieties of large-flowered clematis in commerce. Every year this firm seem to do better and better, and this year they fully come up to the high standard they set last

year, if they do not surpass it. Blues, mauves in light and dark shades, delicate pinks, along with whites, all mingle together and produce an effect that is rarely obtained by any other flower. These shades are brought out in relief by the foliage of a few of the brilliantly autumn-tinted Japanese maples at well chosen points. When coming to single out varieties it seems invidious to mention names, as one is equally as good as its neighbour. We must, however, submit a number which appeals to us. In the singles, such varieties as Lady Londesborough, with large blossoms of a pale mauve colour; Alexandra, with fine spreading flowers made up of four petals of a delicate mauve with a ring of white stamens in the centre; Jackmanni superba, a much improved form of the type carrying beautiful dark purple and velvety blooms; Mme. Edward Andre, with flowers of a good red tone; King of the Belgians, lilac-blue with a tinge of pink; W. E. Gladstone, with large blooms made up of spreading spoon-shaped petals of a light blue colour; and last but by no means least, The Bride—one of the new varieties, which, in addition to being tall and handsome, is probably the freest flowering white variety we have. In the double forms, we note the ever popular Belle of Woking and Duchess of Edinburgh (white).

In their exhibit of greenhouse plants, Messrs. L. R. Russell of Richmond stage a few of the more popular kinds, and these lend a distinct touch of colour against the foliage of the other shrubs on their stand.

## IRISES

Both alone and associated with other flowers irises are to be seen in all their glory. The tall pallida irises predominate, and these are represented by many excellent varieties which have long stems bearing two and three and at times even more flowers fully open.

One of the largest collections is that of Messrs. George Bunyard and Co., who are to be congratulated on the success of their arrangement. There are irises of all possible types and colouring, and to break the lines and show up the charm of form which is peculiar to the iris they have occasional patches of *Lilium regale* and *Campanula Fleur de Neige*. The white flowers of these two plants are an immense help to the scheme. Except perhaps for the yellow-tipped white flowers of *Iris Monieri*, white does not naturally enter into the iris



A PORTION OF MESSRS. BUNYARD'S FINE COLLECTION OF IRISES.





SOME OF MESSRS. TOOGOOD'S SPANISH IRISES.

scheme. Perhaps the very best of their many pallida varieties are Alcazar, Mme. Schwartz of delightful lavender tone, Corrida, Crusader (a medium blue flower brightened by a gold crest), Asia (which has a metallic lavender standard and deeper coloured falls) and Prospero. The squalens section, of lovely but baffling colour schemes, are represented by many most desirable varieties. A good selection of those to be seen includes Ambassador, Rosalba, Her Majesty and Glamour of pink tones, and Princess Victoria Louise, which has deep primrose yellow standards.

These lovely May and June flowering irises are also used to good effect by Messrs. Wallace and Co., who are showing a great many splendid sorts arranged in beds around their central stand. Here, again, it is the Iris pallida varieties that attract first attention by reason of their greater height and the depth of the falls on the plentiful flowers. Magnifica, of rosy lavender and rich purple colours, is an excellent example of this type. Tamerlane has pale blush standard and dark blue falls, Souvenir de Mme. Gaudichau, Shalimar, Mme. Schwartz with soft blue standards and deeper falls, Asia, Alcazar, metallic lavender standards and rich purple falls, Lord of June with the palest lavender standard and silvery blue falls, Amy Page of Cambridge blue colouring. Queen of May (rose pink and yellow), Fro (rich yellow standards and rosy maroon falls) are splendid squalens varieties. Rather dwarfer, but of sturdy habit, are Blue Boy and Blue Bird, which are beautifully coloured. Interspersed with the above Messrs. Wallace and Co. have some of the beautifully marked oncocyclis irises, including Iris Susiana, I. Leichtlini and I. Psyche.

The grouping of the different varieties in the collection of Messrs. Barr and Sons is singularly effective, and this method well illustrates the garden value of the plants. The chief group is of Peter Barr, a tall iris of very pleasing lavender shades; Purple Laugier, of darker colouring, is an excellent companion variety, as also is La Beaute of rich blue shade. In the background may be seen grouped plants of Rhein Nixe bearing on graceful stems large flowers with white standards and rich purple falls, while near by is the rich blue Duchess of York. The blush pink shading of Wyndham is especially charming, and this harmonises well with Mme. Chereau, which is of creamy yellow colour bordered edged with pale lavender. Jamerlam is of striking metallic blue and

purple colouring. Red Cloud, with its pink-toned standard and reddish mauve falls, also attracts attention, though none of the many varieties so well shown by Messrs. Barr and Sons is more beautiful than Quaker Lady, a rich flower of the I. squalens type.

The Orpington irises are set out on staging in the middle of the large tent, and here they may be closely inspected. In addition to many of the pallida section, they are showing some rarities, and among them is Cretan, which is especially noteworthy on account of its unusual height and the delightful fragrance of the flowers. This harmony in blue and maroon shades was found in Crete, from which it obtains its name. Tiflis and Caucasian are said to be seedlings from Iris imbricata. Although of dwarfer habit than the previous variety, they have large flowers of great charm. The former is of metallic blue shades, while yellow predominates in the latter. Scrimgar of very dark purple colouring possesses unusually long falls. Fritjof (blue), Royal (a very dark blue), Odin (white with yellow crest), Yellow Hammer and Zwanenberg are other delightful irises to be seen in this collection. A little bowl of I. californica seedlings is particularly charming and of especial interest in that a great variety of fascinating flowers may be raised from seed sown out of doors.

On Messrs. Toogood's stand a large collection of Spanish irises interspersed with Darwin and cottage tulips and sweet-

scented stocks is shown. The irises are well arranged in tall stands, and include II. filifolia, Imperator (dark blue shades), Sensation (paler blue), Hart Nibbrig (medium blue), Innocence and Flora (pale shades).

In association with his unique collection of hardy ferns, Mr. Amos Perry finds an excellent setting for some choice irises. The Regelio-cyclis varieties, with their fascinating markings, are to be greatly admired. Typical examples are Cyclemestra, Olympia, Luna and Charon. The last named is, at first sight, weirdly sombre, but its full beauty increases with a closer inspection. I. Korolkowi has lovely lavender lines on a pale ground, while Sirona is of very uncommon reddish maroon colour. Besides the above, there were a goodly few of the taller pallida section and such as Bosnia maculata, with straw-coloured standards, and the blue shaded Mars.

De Golde are showing Dutch irises, tulips and anemones. Among the first noticeable varieties are Præcox, a good lavender, a fine golden yellow seedling, and David Blesh, a very good blue-lavender. This firm is wholesale only.

## ANNUALS

A considerable amount of time and thought must have been expended by Messrs. Sutton and Sons on their unique exhibit. The general idea, as the military have it, is a central circle of antirrhinums and nemesias, with radiating blocks of the same plants in very many varieties. Broad gravelled paths, bordered by close grass of the greenest and most even texture, give easy access to the exhibit. Generally it is composed of antirrhinums and nemesias—there are a few other plants, a very dwarf white alyssum, the variegated coleus, but these are quite secondary to the scheme. Each individual of the immense number of plants is a model of the highest cultural skill. Many of the tall spikes of antirrhinums measure over a foot in length each, while the nemesias are studded with flowers. The principal antirrhinums are Old Rose, Buff-Pink and Bronze, of the tall varieties. Mauve Queen, Mauve Beauty, Buff Beauty, Cream, Deep Crimson and Rosy Queen, of the intermediate type. Excellent as are these stately antirrhinums, which first catch the eye, they are surpassed in the cultivator's esteem by the nemesias, whose flowers are exceptionally large and of great depth of colouring. Cherry Red is a brilliant variety, while Blue Gem is almost like a giant forget-me-not. Aurora and Twilight are the names of two uncommon bicolor varieties, the former has red and white flowers, while those of Twilight are mauve and white.



NEMESIAS AND TALL ANTIRRHINUMS COMPRISING MESSRS. SUTTON AND SONS' EXHIBIT



Generous banks of schizanthus and stellata cinerarias are the keynote of the very attractive exhibit arranged by Messrs. Webb and Sons. The cinerarias are especially delightful and these lead down to plants of the large-flowered type on the ground line. From the profusely flowered schizanthuses spring groups of gloxinias of a good strain, clarkias and *Primula obconica*.

At the far end of the large tent Messrs. Carter and Co. have a wealth of bloom on magnificently grown plants. There are large mounds of a double, rose coloured clarkia and stellata cinerarias, circles of monster hippeastrums of great merit, gloxinias of many sorts, and *Schizanthus* Carter's Butterfly. Through the whole length of this large exhibit there runs a most fascinating line of Carter's Queen of the Roses petunia. The gloxinias include such splendid strains as Carter's Spotted, Invincible Prize and Cyclops. Their long-spurred aquilegias and the two groups of *Phlox Drummondii*, pale salmon and crimson, are equally charming. This large group is bordered by lily of the valley, bearing countless numbers of fragrant flowers, and is flanked by other groups composed of *Cinerarias* Bouquet Pink, Bouquet Blue and Bouquet Mixed, Spanish irises, schizanthus, nemesias and antirrhinums.

In the orchid tent Messrs. Watkins and Simpson have a large group of schizanthus Dr. Badger's strain. These magnificent plants, in roin. pots, bear enormous quantities of flowers in a fascinating variety and delightful colours. At each end of the oval group they have placed dwarf floriferous plants of their *Salvia Harbinger*, which well illustrates its earliness and great garden value.

Quite distinct in type and character is Mr. A. Dawkins' strain of dwarf hybrid schizanthus. These are wonderful little plants about 15 ins. high and growing in 5 in. pots. They are exceedingly floriferous and embrace every possible shade of colour. *Schizanthus Wisetonensis* varieties, with exceptionally large spikes of a white stock, probably Snowdrift, are shown by Messrs. Godfrey and Son, while the Blakeney Nurseries Company are showing schizanthus with Coltness Gem dahlias.

This break in dahlias, as typified in Coltness Gem, is a valuable one for all lovers of this fine genus, as the colour is very pure.

## VIOLAS & PANSIES

There are no pansies, but violas are represented by two excellent collections, arranged on tabling in the middle run of the large tent. Both collections include varieties with flowers as large and almost as rigidly formal as those of the show pansy, and also the relatively tiny *gracilis*, which is so free-flowering and of such graceful habit.

Of the large-flowered violas being shown by Mr. Wm. Yandell, one admires Malcolm Miller of primrose colour with heliotrope markings. Rebecca is a deeper yellow shade with similar edgings of heliotrope. Mrs. Milligan is the best white. Moseley Yellow has flowers of very rich colour. Mrs. Mac-Ewan is creamy yellow, edged with purple. Oxhill Purple is a richly coloured flower. Elsie Purser is a deeper and velvety purple. Mrs. Edith Bastock is purplish violet, with light rays. Springwell Bronze is the very best representative of the bronze violas which are always so popular that the supply never equals the demand.

Equally good violas are shown by Mr. H. Clark and his method also shows off the flower to the best advantage. Those especially to be noted include *Admiration*, dark blue; *Archie Grant*, deep indigo blue; *Baron Newlands*, deep yellow, edged blue; *Blanche*, a large creamy white; *Donald McDonald*, cream, broadly edged with azure blue; *George Callan*, crimson marbled with pink; *Hunter Beattie*, large rose self; *Jean Paterson*, white, streaked with violet; *J. V. Macdonald*, pure white; *Maggie Mott*, soft mauve; *Miss A. Norton*, large dark purple; *Mrs. James Scalley*, white edged with blue, and *Mrs. Chichester*, white marbled with blue.

In association with their well grown double marigolds, Messrs. Artindale and Son placed bowls of violas. The chief sorts were *George Macdonald*, yellow, lightly flaked with heliotrope; *Mrs. Marrison*, dark mahogany striped with rose, giving a suggestion of bronze; *Mrs. Ben Waid*, white, freely striped with deep mauve; and *Bessie Ferguson*, pale cream,



ONE OF MESSRS. WEBB'S NEW CINERARIAS.

definitely bordered with deep heliotrope.

With their zonal pelargoniums Messrs. Jarman and Co. showed baskets of *Viola* Purple Red, Mauve Queen, Heavenly Blue, Wyndly Gem, Dainty, reddish maroon with blue.

## CARNATIONS

The growing popularity of carnations is clearly evidenced by the magnificent exhibits put up by the leading raisers of this flower. They undoubtedly add a valuable contribution to this annual commonwealth of flowers, and, although surrounded by a host of many other equally beautiful subjects, yet they take a leading place, which is in no small measure due to their extensive range of colour, their large blooms, and in the varied uses to which they can be put in the garden. Year after year, novelties make their appearance, combined with the improvement of the older varieties, and the attention of the public cannot but be focussed on such floral assets to the garden.

This great advance is illustrated by the extensive collection so admirably staged by Messrs. Allwood Brothers in the large tent. This is probably one of the largest exhibits of carnations ever staged at Chelsea or at any other flower show. The style of the exhibit is unusual, but nevertheless attractive. The perpetual-flowering varieties are grouped in the centre of their exhibit to form a large coronet, and as such is most effective. This group contains a number of novelties, and of those we note *Shot Silk*, *Indian Chestnut*, flaked red; *Cameron*, rose pink; *Butterfly*, white overlaid claret; and *Beauty of Durham*, salmon pink. There are, in addition, several of the older and better known kinds, such as *Jessie Allwood*, which still ranks as one of the best yellows we have. *Laddie*, of a glorious shade of pink, is also there.

The border varieties, *Allwoodii* and the new perpetual border forms are set out in beds with grass edgings which enhance their general appearance, although, unfortunately, the fact that the flowers are in vases is only too evident. The most striking novelties are the new bizarre carnations, such as *Sussex Flake* (blush striped red), *Sussex multi* (red striped crimson and maroon),



A CORNER OF MESSRS. CARTER'S FINE EXHIBIT SHOWING THEIR GLOXINIAS.



Sussex Ray (flesh striped crimson-claret). These undoubtedly appeal to many, while others again are better contented with the Allwoodii, in which section they will find Ann, a large double white with a maroon eye; Jane, a large double pinkish mauve; and Roger, of a deep salmon tint rayed maroon. These three novelties show in some measure what a considerable advance has been made in this class. In the old-fashioned border section almost all the up-to-date varieties are on show in their myriad shades of pinks and crimsons.

Messrs. C. Engelmann, Limited, whose fame as growers and raisers of carnations is spreading rapidly, are also staging an enormous and magnificent group which comprises upwards of 10,000 blooms. The exhibit gains much in appearance from its corner situation, and this has been taken advantage of to the full in the general arrangement. The blooms are all exhibited in vases and look exceedingly well with trimmings of asparagus for decorative effect. In the corner stands a magnificent array of blooms of Enchantress Supreme, flanked on either side by the bright scarlet blooms of Tarzan; while Red Laddie, a 1925 novelty with flowers of a rose-cerise shade, comprises the foreground. The huge vases of Nigger also make their appeal and provide a patch of a darker shade which serves to throw up in contrast the beautiful blooms of White Enchantress and the blush pink flowers of Canada, a variety recently registered by this firm. Another variety, Dainty, with blooms of yellow flaked with crimson, also calls for a word of admiration.

Messrs. Keith Luxford are staging a fine collection on a table space in spray vases.

Wonder. The green of the decorative foliage considerably enhances the appearance of the stand.

Alongside their collection of greenhouse plants, Messrs. Stuart Low and Co. are staging vases of White Pearl, with Topsy in the background providing good contrasting effects. A dainty touch is supplied by the use of hanging baskets filled with that charming salmon-pink variety, Eileen Low. These flank the other kinds. Sir Philip Sassoon is seen in larger quantities than was the case last year. It has the rich maroon shade and the old clove perfume of the old English clove. A touch of lilac pink is supplied by Mauve Queen, while a dash of brighter colour is produced by a pretty fancy variety, Lady Hindlip, with white ground striped carmine.

Mr. James Douglas, whose name is almost synonymous with clove carnations, is exhibiting a large number of splendid blooms. Among the fragrant clove varieties which are on view are Bookham Flame, of a wonderful flame apricot shade; Wonder Clove, carrying huge blooms of brilliant scarlet; Salmon Clove, of a soft salmon shade; White Clove, snowy white; Queen of Cloves, of a delicate shade of lilac rose. The fact that all these clove varieties are hardy in any part of these islands is not, perhaps, so universally understood and appreciated as it ought to be, and their presence in the garden lends an old-time flavour, as well as adding considerably to the perfume of the other flowering subjects. Mr. Douglas also stages quite a number of border varieties, and these, considering the earliness and the general backwardness of the season, are in remarkably good condition.

Mr. F. W. Seymour of Finchley stages excellent blooms in vases of such border varieties as Mary Murray, Lady Shackleton, Salmon Clove, Sir Douglas Haig and Steerforth. The whole exhibit, which is well arranged, reflects credit on the exhibitor.

Last, but by no means least, comes Messrs. Lowe and Gibson's table of carnations in pots. The arrangement aims at producing an effect as obtains in any garden. One variety which takes the eye is Joan Wardale, a novelty and a really good rich crimson self. It is rather early in the season to judge of its capabilities, but we should think it is one of the coming varieties. Mary Allwood is there, and is probably the best yellow self there is. The perfectly formed blooms are carried on long stems. A novelty for 1926, Mrs. L. Gibson, reminiscent of Kelso, is most attractive. It is a flaked variety, and is a much better grower than Kelso. Older varieties such as Elaine, Mrs. Nora Cox and Gordon Douglas, are still to the fore and are as yet hard to beat.

## HARDY FLOWERS

In the big tent Perry's Hardy Plant Farms exhibit one of their usual splendid collections of hardy ferns, with a suitable and beautiful foreground of cut herbaceous flowers and growing alpine. Besides a considerable collection of fine, if backward, bearded irises, Camassia Leichtlinii var. lutescens, Dodecatheon Meadia and D. Purity, a beautiful, almost golden yellow Moræa species, Trollius Orange Prince and Watsonia Ardernei, are specially noted.

Messrs. Storrie and Storrie of "Tiny Seedling" fame, have a circular group of really fine long-spurred aquilegias, polyanthus and alpine auriculas of the free and easy type, suitable for border decoration; altogether a very interesting and attractive exhibit.

On Mr. G. Reuthe's exhibit of varieties we note, among a great number of flowering shrub sprays, the capricious Chatham Island lily, Myosotidium nobile, and the remarkable Beschorneria yuccoides, a rare Mexican succulent, hardy in our more favoured localities.

Messrs. Bees have a well spaced group, containing a wide variety of herbaceous and alpine plants, diversified with brooms, lilacs and other shrubby things. A very beautiful fern, Struthiopteris pennsylvanica, occupies a prominent place; lupins, long-spurred aquilegias, candelabra primulas and an exceptionally fine strain of polyanthus occupy considerable spaces, and we noted fine colonies of the rare Primula chrysopa and Incarvilleas brevipes and Bees' Pink, as well as a really considerable drift of the quaint and still rare Roscoea cautleoides.

Messrs. Geo. Bunyard and Sons, in their fine group of bearded irises, include two fat clumps of the double white Campanula persicifolia, known as Fleur de Neige. As a bellflower, this is a wash-out, but considered as a mass of pure colouring, with a spike—rather viscaria-like—effect, it is worth noting for the early summer border.

Mr. E. Scaplehorn includes in an exhibit, mainly alpine in character, Verbascum densiflorum, the double white rocket and Tritoma aurantiaca.

Messrs. Artindale and Son have a gorgeous mass of colouring in a table group of a very fine form of our old friend the Scotch or pot marigold masquerading under the name of "Ball's Calendula!"

It is yet early in the season for the delphinium, a flower which does not take kindly to forcing, yet the bold group with which Messrs. Blackmore and Langdon flank their splendid begonias is built up of plants admirable in form, colouring and stature. An immense and perfect spike of the heliotrope



THREE OF THE NEW SUSSEX FLAKED VARIETIES EXHIBITED BY MESSRS. ALLWOOD BROS.

The fact that the old varieties are still good and also popular is furnished by this exhibit, which contains all these old stagers. Surprise is quite a novelty, however, and is good. It carries large blooms of a fine delicate pink colour. Mikado is there and still holds the fort as regards a good mauve, while Aviator retains its position as one of the best scarlets. Mrs. Walter Hemus is a good pink, and Topsy a good crimson. Among whites, we single out Wivelsfield White and White

That amateurs can put up successful exhibits is evidenced by the one staged by the executors of the late Sir William Cain. The effect is so natural, owing to the grouping of the blooms. Pinks, whites and crimsons mingle together, and give the most pleasant effects. A large group of Souvenir de la Malmaison Princess of Wales calls for attention, although the individual blooms are rather past their best. White Pearl is there, also Carola, a good maroon crimson.



Mrs. A. J. Watson dominates the exhibit, while Mrs. Townley Parker, Nora Ferguson, the azure Constance, and the puce purples Mrs. Colin McIver and Lord Derby are among those specially worthy of note. Fairy Queen, which has been relegated to a back corner, is a fascinating thing which can best be described as a clean pinkish lilac with a dark brown "bee."

Messrs. G. Gibson and Co. have a group largely alpine in character, but containing such border favourites as *Thalictrum*

culture, and their giant form of *P. Littoniana* is a giant indeed, and a drift of a couple of dozen plants on their tabling is as remarkable a sight, in its way, as anything to be seen at Chelsea. Among a group of gaudily coloured candelabra primulas the soft yellow *P. sikkimensis* looks delightfully cool, as do plants of the hardy maidenhair, *Adiantum pedatum*.

Mr. G. W. Miller in a rather congested group shows some well flowered if rather loose-petalled polyanthus.



LUPINS AND HERBACEOUS PLANTS SHOWN BY MESSRS. WATERER, SONS AND CRISP.

*aquilegifolium purpureum*, *Anchusa myosotidiflora*, *Ranunculus speciosus plenus* and *R. aconitifolius fl. pl.*

Messrs. Maurice Prichard and Sons have a fine bank of herbaceous stuff in which named groups of the Bartley strain of pink *Primula pulverulenta* play a prominent part. A gigantic hybrida primula, obviously of *pulverulenta* kin, but of a glowing cardinal red toned with terra-cotta and called George Thursby is another notable feature of a group which includes excellent lupins, *trollius* and *camascias*, *Dielytra spectabilis* and other desirable things.

The adjoining group by Messrs. John Waterer, Sons and Crisp displays most effectively *Anchusa italica* in the varieties Opal and Pride of Dover. Many fine herbaceous lupins, including the well named Dresden China, the violet-purple Happiness, Opal in delightful lavender tones, the deeper coloured Penelope, the blue and white Mayflower, Pink Pearl, Delight and the Sunshine, the last named a good yellow of the Somerset clan, but a great improvement on that now out-dated variety. Mulleins, too, are well represented in this exhibit, these including *Verbascum densiflora* and the pale buff apricot W. Walker. *Trollius* and long-spurred columbines are also well represented.

The Chalk Hill Nursery show some of their specialties on the cross-staging. These include fancy pansies, a few violas, the Chalk Hill giant mimulus (a very useful and brilliant flower for wet borders or waterside), candelabra primulas and long-spurred columbines.

The adjoining contribution from Messrs. Bakers is mainly alpine, but *Incarvillea grandiflora*, the inevitable bog primulas, including in this case *helodoxa*, *Thalictrum aquilegifolium*, lupins and columbines will hardly fall into this category.

Messrs. Oliver and Hunter find their cool Scottish climate favourable to primula

Messrs. Reamsbottom display their wonderful strain of St. Brigid anemones with an effective background of black velvet and interspersed with fern.

Messrs. B. Ladhams, Limited, have all sorts of unlikely things, such as *Nepeta Mussini*, the old red double daisy and Spanish squills arrayed in baskets.

The Maytham Gardens have a veritable spring border planted with peonies, campanulas, irises and so forth, but the juxtaposition of auriculas, bog primulas and bearded irises does not seem a happy one.

Messrs. Sutton's great group of flowers from seed includes the finest lot of snapdragons (*antirrhinums*) ever seen at Chelsea.

All the forms of the Welsh poppy, *Mecynopsis cambrica*, combine to make a drift of orange and lemon on the table space occupied by Messrs. W. H. Rogers and Son, Limited, and healthy plants of *Primula helodoxa* and, once again, of the Bartley strain of *Primula pulverulenta* lend diversity to a fine group mainly consisting of rock plants.

The Blakeney Nurseries have quite a bank of that brilliant bedder *Dahlia Coltness Gem*.

Mr. T. Carlile has an early summer border, containing a good variety of lupins, with *Pentstemon Bridgesii*, *Geum Heldreichii magnificum*, globe flowers, thrifts and so forth. Groups of small plants of various brooms are introduced to lend variety, and, where labour allows, small plants of such flowering shrubs might be used (plunged in pots) to fill spaces left for later flowers.

Messrs. Hewitt are showing irises, tulips and a few early spikes of their famous strain of delphiniums. One of the finest of the delphiniums is a splendid deep blue shaded with purple called Evening; another particularly rich lilac is King Bladud; while there is a magnificent white called Mrs. Christie Miller. These fine delphiniums are noted for their grace.

Messrs. Rich and Co. are staging a small exhibit of excellent quality of tulips, Sunbeam poppies and violas.

Mr. John Forbes has a fine exhibit of East Lothian early stocks. This is a famous strain, the colours are vivid and good. He is also showing the fine *Dahlia Coltness Gem*, *Statice Butcheri* and violas along with a fine form of *Primula Sieboldii*.

## DAHLIAS

Considering that we have, as yet, hardly passed the middle of May, Messrs. Carter Page's circular group of dahlias in the big tent is a thing to wonder at. If things progress at this rate, we shall all be growing dahlias for conservatory decoration, instead of Malmaison carnations. The decorative and pompon sorts are most successful and the plants of Barlow's Bedder, Glut, Vrijbouter, Crimson Flag, all crimson or scarlet decoratives, and of the self-descriptive pompon Chamois Rose, are especially noteworthy but brilliant "Mignon" Coltness Gem, the collerette Scarlet Queen, and, indeed, representatives of almost every section, are to be found here in fine form.

Messrs. J. Cheal and Sons also have quite a collection on staging on the other side of the great tent, but for the most part this takes the form of cut flowers. The Mignon and Star forms are here well to the fore, including such well tried favourites as White Star, Cuckfield Star and Ifield Star. Quite presentable vases of the Cactus sorts, Mrs. F. Paton, Sweetbriar and Mrs. E. Lowes, are also noteworthy.

## GLADIOLI

The day is not yet, apparently, when the gladiolus will emulate the dahlia and become a spring flower. A vase of a variety of apparently *primulinus* origin, a shade or two paler in colour than Fire Queen, and shown by a Dutch firm towards the bottom of the great tent, and three or four nice spikes of *primulinus* hybrids on Messrs. Lowe and Gibson's border carnation exhibit, are, barring two or three vases of the Colvillei section in Mr. E. Scaplehorn's plant group, the only representatives of the flower on view. The Bishop, Lovely, Joy Bells (all *heliotrope* as forced) and Coquette particularly attract attention of this set, while the older King Bladud and the almost amethystine Lorenzo de Medici are equally effective in their way.

## ROSES

The exhibit of Charles Turner, Slough, consists very largely of forced dwarf, half standard and standard roses, some of them hardly ready for exhibition, as the earliest flowers are not expanded, but all fresh and interesting.

Messrs. A. and C. Allen have a much showier group, which, unkind weather conditions notwithstanding, is quite "up to the knocker" for show day. Fine specimens of the coral pink Haverling Rambler suggest a fully double Coquina, but makes a stronger appeal than that rather sleepy-eyed sort. The yellow Mrs. Beckwith, the pink Souv. de Georges Pernet, very pretty as forced, and the ubiquitous Ophelia, are noteworthy in a most attractive group.

Mr. Elisha J. Hicks' great bank of roses is another treat in store for every visitor. The backing includes great masses of growing ramblers, such as Paul's Scarlet Climber, Tausendschön, White Flight, and the Blush and Crimson Ramblers, the last named many degrees off its normal outdoor colouring, but the others wonderfully true to colour-tone. A fine group of plants of America at once catches the eye in the



foreground, as do two pillars of cut flower, the one Mme. Butterfly, the other the beautiful white Mrs. H. Stevens. A basket of giant blooms of Clovelly is another outstanding feature, while Molly Sharman Crawford is also wonderfully well shown. These, however, are but a few of an immense and exceedingly interesting collection of varieties in a capital effort.

Messrs. Benjamin R. Cant and Sons, Limited, have a relatively small bank containing a fine group of plants of the golden Souv. de Claudius Pernet, two new seedlings, the deep citron Mrs. Beatty, which is delightfully fragrant, and Lady Wakefield, a pretty copper apricot sort which, as far as the flower is concerned, reminds one of Mrs. A. R. Waddell. Columbia and the new polyantha Orange King are also to be seen in good form.

The Rev. J. H. Pemberton occupies a length of tabling with a very taking group of, generally speaking, dwarf polyantha varieties. The pale salmon pink Julian,

Henry Nevard will be too blue a crimson for most folk's liking, but Mrs. Wemyss Quin and Lady Roundway are surprisingly good. Standards of the brilliant polyantha La Reine Elisabeth lighten and brighten an interesting group.

Mr. George Prince has a nice little table group, containing such tried if not old, varieties as Columbia, Mme. Butterfly, Hoosier Beauty and America. The fine polyantha Coral Cluster is well shown; so, too, is the grand old Banksian Yellow; while the new and fragrant blackish crimson rose Sensation and the golden Souvenir de Claudius Pernet occupy a position of honour.

Messrs. Ernest Paul have a small collection of roses among their exhibit of tulips. Many of the well known varieties, such as Covent Garden, Golden Ophelia, Molly Sharman Crawford, Richmond and Butterfly are exhibited.

Mr. W. Paul has a large collection of roses. Standard Mrs. H. Morse and Richmond are shown. A small bright red dwarf polyantha,

an improved Vicomtesse. The fruit is firm, an excellent asset for preserving and for dessert. Number three is called Laxton's Rearguard, no doubt on account of its late fruiting properties. It is a cross between Laxton's Latest and Omega, and surpasses its parents in colour, crop and flavour. It appears to be of excellent constitution. This exhibit altogether is a very fine one considering the backwardness of the season and the lack of sunshine which has been experienced throughout the country.

Messrs. Rivers and Son, Limited, are staging their usual large collection of fruit trees in pots. Peaches, nectarines and plums are to be seen all heavily laden with fruit, such varieties as Peach Duke of York, and in nectarines, Cardinal, Early Rivers, John Rivers, and Blue Rock in plums are noticeable. The fruiting capabilities of some of these varieties exhibited are beyond question.

A fine exhibit of raspberries is staged by Mr. V. C. Vicker of Herts. Here again one wants to linger in the hope that a fruit may chance to drop and so satisfy one's curiosity regarding its flavour. Well fruited bushes of the new raspberry Viking are staged. This is an excellent forcing variety, as is also the new yellow fruited variety, Amber. The arrangement is good as the fruiting capacity of the bushes is well shown.

Another amateur with a fine exhibit is the Hon. Sir John Ward of Hungerford. Here we have luscious bunches of Black Hamburgh and Foster's Seedling. These are well formed bunches with the individual fruits of medium size. Strawberries are also present in two varieties, Royal Sovereign and King George V, while peaches and plums are also represented by Hales Early and Early Rivers.

From the Aldenham House gardens there comes once again a very fine exhibit of high-class vegetables. Mr. Edwin Beckett has once more excelled himself, if that can be possible, in the production of this wonderful collection of vegetables. How every amateur must sigh to be able to produce such well grown varieties of each of our staple food crops. Every vegetable dish appears to be represented and although it has been said many times before, yet once again must we offer our congratulations to Mr. Beckett, both for the high standard of excellence reached in cultivation and for the arrangement of his group.

A comprehensive collection of potatoes, consisting of between thirty and forty varieties is staged by Messrs. Sutton and Sons. Among these varieties can be noted splendid dishes of Sutton's Early Market, Sutton's Epicure, Ben Lomond, Stirling Castle, Carisbrooke Castle, etc. An exhibit of potatoes so early in the year is both interesting and instructive, as it serves to show what may be accomplished in the production of such a valuable food crop.

Apples are again in the capable hands of Messrs. Bunyard, who stage a fine array of many excellent varieties in baskets. The high quality of the fruit shows how the question of storing is of such importance. Above all, a cool and stable temperature is required. Such varieties as Barnack Beauty, Sir John Thorneycroft, Ontario, Wagener and Jonathan, are there, and all in excellent condition.

*Our front cover is taken from pinks kindly supplied to us by Mr. G. H. Herbert.*

*In next week's issue we shall publish detailed comments on Rock Plants and Primulas, Stove and Greenhouse Plants, Orchids, etc., and Garden Sundries, with descriptions of New and Rare Plants.*



SOME OF MESSRS. ALLEN'S ROSES.

Corrie Koster (which is decidedly paler and has a better flower than Orange King), the starry, bright-eyed Chatillon Rose and the semi-single White Echo with blossoms just across share honours with Baby Faurax, the most enduring "blue" rose we have so far encountered, the brilliant crimson-scarlet Topsie, Ellen Poulsen and the shell pink Pink Echo, a counterpart of White Echo to which reference has already been made.

Messrs. William Cutbush and Sons have their usual fine array of dwarf polyanthas with fine specimen weeping and other standards to diversify the group. Salmon Queen, Chatillon Rose, Ellen Poulsen and the nearly blood red Superba are shown in capital form. A climbing polyantha known as Red Explorer and shown in pillar form should not be overlooked.

Messrs. Frank Cant and Co. have a nice bank of quality roses. Captain F. S. Harvey Cant is shown in good form, so is the velvety crimson Lord Charlemont and that most gorgeous of golden roses, Mabel Morse.

named Ideal, is a good variety. [Paul's] Scarlet Climber, Rev. F. Page Roberts and Golden Ophelia are much in evidence.

## FRUIT AND VEGETABLES

Probably the most tempting display in the whole show, especially in these hot days, is that provided by Messrs. Laxton Bros., of strawberries in pots and also gathered fruit. They do make one's mouth water with expectancy. Among them are to be found many of the older varieties, such as Titbit—a 1924 variety of good size and flavour—The Duke and Abundance. There are three new strawberries, however, which call for a word. Robust, as its name implies, is a robust grower, ripening in mid-season. It is a fine fruit of good size, colour and flavour. Another excellent new introduction is Laxton's Empress, which may be regarded as



No. 6



The  
Cricket Club  
Secretary

## Men who appreciate The **ATCO** MOTOR MOWER

In the letter reproduced above the Secretary of one of many Cricket Clubs using the ATCO Motor Mower expresses his opinion of the machine. Let us prove ATCO claims by arranging a free demonstration on your own grass without obligation.

16 inch **£50** 22 in. Model **£75**. 30 in. Model **£95**  
Model Personally Delivered and Guaranteed 12 months

Send for free booklets, "Turf Needs" and "Notes of Praise."

**CHAS. H. PUGH, Limited**

Whitworth Works, 31, Tilton Road, BIRMINGHAM

April 1, 24.

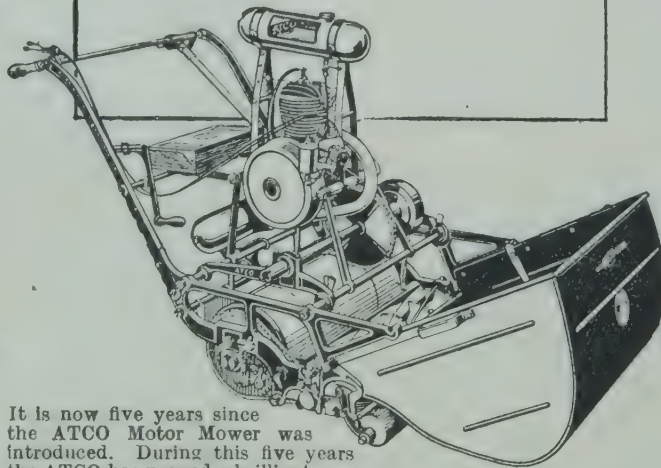
Ugbrooke,  
Chudleigh,  
S. Devon.

Dear Sirs,

You may be interested to see from enclosed report that your Atco Mower has been a great success and a saving compared with horse hire. Our ground has been selected for a County Trial match - on account of its excellent condition; this is mainly due to your machine. I saw your Cultivator attachment while at Olympia last month - and have a leaflet about it. Can you give me particulars as to price? I am anxious to get one, but could we pay by instalments as we are not a rich club and could not run to a big outlay now.

Yours truly,

G. Hammer



It is now five years since the ATCO Motor Mower was introduced. During this five years the ATCO has proved a brilliant success in the hands of every class of user.

## CHELSEA SHOW

### BACKHOUSES' of YORK

THE PIONEER SPECIALISTS in  
ROCK GARDEN CONSTRUCTION  
AND  
ALPINE PLANT CULTIVATION

are Exhibiting some of the  
**MOST CHOICE ALPINES**  
:: of the present day ::

VISITORS are invited to make  
their enquiries on all matters  
relating to the **ROCK GARDEN**  
either at the SHOW or by POST.

EXPERT ADVICE will be  
freely given, and Catalogues  
on all GARDEN SUBJECTS may  
be had on application at  
CHELSEA or to YORK.



THE YORK NURSERIES  
are noted for well grown, Hardy  
Plants, Roses, Trees, Shrubs.



Backhouse Nurseries (York), Ltd.  
THE NURSERIES .: YORK

Please mention THE GARDEN when writing.

## WALLACE'S LILIES and IRISES

We welcome visitors to our Nurseries at all times, and especially in June, when the slopes of "The Old Gardens" will be alight with many thousand Iris spears and shafts. We are confident that Iris lovers will find our fine collection of the greatest interest.

### LANDSCAPE and GARDEN ARCHITECTS

This department is under the personal supervision of Mr. R. W. WALLACE, V.M.H.

We prepare plans and designs and carry out landscape work for new grounds or for renovation of old gardens. The construction of rock works and making of water gardens is undertaken in any part of the country or on the Continent.

**R. WALLACE & Co., Ltd.**  
The Old Gardens, TUNBRIDGE WELLS





For a Catalogue of  
JACKMAN'S unique  
collection of

# CLEMATIS

WRITE TO

**Geo. JACKMAN & SON**

*Woking Nurseries,*

**WOKING, SURREY.**

ESTABLISHED OVER A CENTURY.

**200 ACRES OF TREES,  
SHRUBS AND PLANTS.**

*Please mention THE GARDEN when writing.*

## LOVERS OF SCHIZANTHUS

will see these Plants in  
perfection on Table T at

**CHELSEA SHOW.**

**A. DAWKINS**

**408, KING'S ROAD,  
CHELSEA, S.W.10**

*17 years Manager Seed & Bulb Dept.,  
JAMES VEITCH & SONS.*

## BULBS

Special quotations given for early  
orders against any retail Dutch  
House of Repute.

*Please mention THE GARDEN when writing.*

*Hewitt*

# DELPHINIUMS

## COQUETTE

Long spikes with flowers of Pieroma violet  
shaded blue.

## JOY BELLS

Long spiral spikes bearing deep rosy mauve  
flowers.

## MONARCH OF WALES

Huge spiral spikes with flowers of pale blue  
and reddish mauve, with white eye.

## MRS. TOWNLEY PARKER

Good sized spikes bearing beautiful sky-  
blue flowers with white eye.

## MILLICENT BLACKMORE

Medium spikes, large blue and mauve tips.  
A.M., R.H.S.

## THE BISHOP

Greatly improved Rev. E. Lascelles.

## WEMBLEY

An improved Millicent Blackmore.

**IRIS** in variety.

*See our Group at CHELSEA  
for the above, and other leading  
varieties.*

CATALOGUES FREE ON APPLICATION  
to

**HEWITT & CO.,  
LIMITED**



DELPHINIUM—"MONARCH OF WALES."

**The Nurseries, SOLIHULL**  
(Near BIRMINGHAM)

*Please mention THE GARDEN when writing.*

## HIGH GRADE FERTILISERS FOR QUALITY AND ABUNDANCE.

### No. 1. SEMI-ORGANIC—PERFECT GENERAL PLANT FOOD. Both Stimulating and Lasting.

Amm. 4.5 Phos. 22.5 Sul./Potash 5.6 7 lbs. 1/10 14 lbs. 3/3 28 lbs. 6/- 56 lbs. 11/- 1 cwt. 20/-

### No. 2. ORGANIC PROMOTING HUMUS.

Best Substitute for Stable Manure, Excellent  
Plant Food, Lasting, Gives Good Heart to Soil.

Amm. 5.5 Phos. 18.2 Sul./Potash 4.8 7 lbs. 2/- 14 lbs. 3/6 28 lbs. 6/6 56 lbs. 12/- 1 cwt. 22/-

### No. 13. 56 lbs. 9/- SPECIAL ORGANIC LAWN. 1 cwt. 16/- Promotes very fibrous turf and thick mat fine grasses.

Cash with order. Carriage Paid U.K.

**H. P. TRIPP, Orchard Works, VIEWSLEY, MIDDX.**

*Please mention THE GARDEN when writing.*

**"T  
R  
I  
P  
P  
E"  
BRAND**



# MELON CULTURE

IF we were living in certain parts of the United States it is doubtful whether notes on melon culture would have any utility, for the practice seems to be that of sowing seed on mounds of soil, and just waiting for the fruit to appear, and they certainly grow a vast quantity, being, I should imagine, one of the principal melon consuming nations in the world. In the British Isles, where climatic conditions are considerably different, it is another proposition to grow melons with the most complete success, and decidedly a more expensive matter in these days of dear fuel, but a good crop of well grown excellent fruit is a sure reward to those who undertake the task. With a view to assisting those who wish for success with this luscious dessert, it is as well to remark that it is not advisable to attempt to grow melons at the same time, and in the same structure as cucumbers, which is often done, for, although cultural methods are closely allied, yet, atmospheric conditions for the two fruits require to be different. Both are species of the same genus (*Cucumis sativa*, the cucumber, and *C. Melo*, the melon), but one is eaten as a ripe fruit, while the other is a green salad, hence the call for differing atmospheres.

The melon, which was introduced to this country about the year 1570, is a native of Asia, in particular the Himalayan regions, and this fact has an important bearing in its culture, for, exposed to the strongest sun in its native haunts, it will be understood that even when raised under glass in this country, the temperature and strong sunlight will not adversely affect it, and therefore shading under such conditions is not necessary, although this is frequently done. Even the heavy moisture which is prevalent in the atmosphere at certain stages of its growth is not inimical to it, for such stagnant humid heat often prevails in the regions from whence it comes. There are many different forms of the melon, but in the present notes we will only consider the generally cultivated forms, raised and in general use in this country. The great aim in the growing of this fruit should be to keep the atmosphere as buoyant as possible at all times, and when it becomes too heavily charged with moisture, then careful and attentive ventilation should be carried out, in order to correct this.

A start should be made by raising seedlings at the end of February or beginning of March, placing one seed in a good turfy mixture, in zin. pots, and placing on a bed where bottom heat is prevalent, to germinate. The temperature for this should be between 70° and 75°, and once germination has taken place, then the young plants, throughout the rest of their career, should never be permitted to become dry at the roots, though watering will have to be controlled at various stages of growth, more being required at certain times than at others.

The bed should be prepared for planting into in March, and the compost

should comprise three parts good turfy loam, one part well decayed horse manure, two parts clean road grit or sand, and half a peck of crushed charcoal to every barrowful of this mixture. The sand is a most important ingredient, for the aim should be to maintain the bed in a sound condition throughout the life of the plant, and this can only be done if the bed is properly porous.

Training is often a matter of controversy. Some growers like to pinch out the points when 6ins. high, and aim for two growths, but I prefer the one growth throughout, tying this carefully to the trellis wires for support. When the plants flower, hand fertilisation is necessary, removing the male flowers to fertilise the female ones, and once three or four good fruits are set, I look on this as being the correct burden for the plant

nets or boards can be used, the writer's fancy turning to small squares of deal, tied at the right levels properly to support the fruit, by strong string to the trellis wires. At the ripening period cracking round the stem of the fruit will denote the time to remove from the plant, for completing the process off the vine in the drier atmosphere of a fruit room.

One point that should be noted as advantageous is to do the fertilising of the four fruits, or as many as it is decided to permit the plant to carry, at the same time, so that all start comparatively equal and thus do not handicap each other. Cutting out should also be carefully regulated, for wholesale slashing out of superfluous growths will probably assist that dreaded melon pest, *canker*, to get a hold, and the plants should be



MELON FRUITS SUPPORTED BY MEANS OF NETS AND BOARDS.

to carry. All the growths which follow should be stopped, and it is advisable not to do this all in one operation, as it will probably prove too severe a strain on the plant. Dry air is essential during setting, and slight ventilation should be given during the whole of this period. Lateral growths should be stopped at a joint beyond the fruit, and not more than one fruit allowed to a lateral growth. Watering should be sparingly carried out at the start, but may be more freely done once swelling begins. When ripening commences, too much water is harmful and air becomes important again at this stage. Syringing should be done twice a day, both before and after fruit setting has taken place, to assist growth and to keep down the harmful red spider, which will attack the foliage if the atmosphere is too dry. The floor of the house should be well damped down to assist in these matters, but again cease these two operations when ripening commences.

The fruit should be supported from quite a small size, and for this either

carefully handled in the early stages, as the disease is possibly permitted to affect the plant through a scratch or knock to the stem, aided perhaps by heavy, incorrect atmosphere and insufficient drainage of the bed.

To aid the swelling of the fruit, weak liquid manure may be given to the plants, changing occasionally with a reliable fertiliser, and alternating with the applications of clear, tepid water. All liquid applied should be of a temperature approximate to that of the bed. Cold, chilling water should never be given as it checks the plants badly.

Melons may be successfully grown in heated pits and frames on hot beds, and for the latter purpose the bed should be made up, about a fortnight before planting, of fresh fermenting material, such as long stable litter and suitable leaves mixed. In this method of growing it is preferable to allow the plants to wander loose on the bed, training and setting, as well as handling generally, in the manner approved for culture in a house. The fruits can, in this case, be laid on a tile



or slate, using means to prevent them from rolling as they grow.

Those wishing to continue the supply during autumn and winter should raise a batch of seedlings about mid-June, to take the place of the other plants as their fruits mature, and they are past their stage of use, but I do not think that melons that ripen during late autumn and

early winter are really worth the trouble that has to be bestowed upon them.

There are many good varieties of melon, but I still look on the old Hero of Lockinge, a white fleshed variety, as the very best we have. A good green fleshed variety is Emerald Gem, which has unusually thick flesh, of excellent aromatic flavour. Four scarlet fleshed

varieties appeal to me as being ahead of the others, and they are King George, a strong growing form with very thick flesh and heavy weight; Superlative, a medium sized variety, of very rich flavour; Blenheim Orange, with deep, solid flesh and thin, even rind; and Reed's Scarlet Flesh, another variety of very fine flavour. EDWIN BECKETT.

## PLANT PROPAGATION IN THE TROPICS

BY DR. R. J. D. GRAHAM.

"IN TROPICAL REGIONS VEGETATIVE PROPAGATION IS AS YET BUT LITTLE EXPLOITED."

A FEW weeks ago it was my good fortune to hear the presidential address to a horticultural society. The subject chosen was plant improvement, and there was an indication that such work was peculiar to the West and was practised but little, if at all, in the East. My mind turned to what I had seen in the vast rice fields of India with the multitude of different kinds of rice cultivated there. Each rice bears its own native name, and the different kinds are each recognised by head marks known to the cultivators. Seven hundred vernacular names in one province and over a thousand in another indicate considerable skill in plant breeding. In no agricultural crop in the West has breeding work been carried to such a point. One has to turn to roses, sweet peas or some other garden favourite to get anything at all approaching the fine points of distinction which differentiate one rice from another. Such intensive plant-breeding owes nothing to the West. It is an indigenous product of India, its origin lost in the mists of the past. Plant improvement in the West has found its highest expression in horticulture, attention having centred on the development of form and colour. In the East the needs of the inner man have forced attention to one of the staple food crops, establishing an even richer number of types.

The quotation standing at the head of this article appears in the printed abstract of one of the papers read at the Imperial Botanical Conference last July. Again the mind is led back to what one has seen in India. Without claiming any superiority, but as an instalment towards the debt due to the chance that carried one abroad, the quotation may serve as a text to a survey of things as they are in the fields and gardens of India.

Sugar-cane is a reed-like grass which grows to a height of 10ft. or 12ft. One group of canes includes all the thick canes, while the thin canes form a separate class.

Within the two classes there are numerous varieties. Some canes flower annually, others but rarely, and in either case very little seed is ever obtained. The millions of acres of canes necessary to sweeten our lives are all grown from cuttings. True, there was a dear lady once who thought thick canes were grown from loaf sugar and thin canes from castor sugar!

Sugar cane, like potatoes, is often cited as an example of a plant which deteriorates through continued vegetative propagation. Recently much work has been done in the West Indies and in India in raising seedling canes. There is no doubt about the need of disease-free canes, just as there is no doubt about the need of immune potatoes. One is tempted to suggest another source for the deterioration when the cultural conditions meted out to either crop are considered. Both sugar cane and potatoes are, to all practical purposes, grown upon manure. May it not be this over-cultivation which is the root of the trouble? Over-cultivation lowers the resistance of both plants to disease, and disease is followed by deterioration.

Another crop of the tropics raised continually from suckers is the banana. Seed is rarely produced in the cultivated races of banana, and when unexpectedly found stands little chance of being saved for sowing. In my wanderings I have only once met a man who chanced on a seed of a cultivated banana. A broken tooth had obscured the scientific value attaching to the discovery. Without vegetative propagation in the tropics the answer to the popular song anent bananas would be true. The banana may well be held up to those who see evil inherent in vegetative propagation. From the earliest records, so far as one can learn, the banana has been continuously and successfully raised vegetatively.

Tapioca or cassava from *Manihot* utilissima—a near relation of a rubber-producing tree—arrowroot from *Maranta arundinacea*—with vanilla and ginger to flavour them, are propagated by division. Yams and sweet potatoes, poor substitutes for the real article, are grown from cuttings of the vines or from tubers.

Turning to fibre-producing plants, we find the yuccas and the agaves in India propagated vegetatively, as also is the bow-string hemp, *Sansevieria zeylanica*, and the ramie fibre plant, *Bœhmeria nivea*, used nowadays for incandescent gas mantles.

Nor is the Indian fruit-grower behind his Western brother in skill in his craft. Though fruit trees can be grown from seed in India as at home, recourse to vegetative propagation is made to secure earlier maturity and consistent quality of fruit. Among the fruit trees of India perhaps the best known is the mango, through its association with native conjurers and Indian chutney. The best varieties of mango are invariably perpetuated vegetatively. The commonest method is by grafting by approach or in-arching on to seedling mango stock, but grafting is also carried out. The guava, a fruit possibly more popular in the form of jelly than in the fresh state, is best

propagated by layering. The orange is propagated by budding except in Assam, where trees bearing good oranges are raised from seed. The owner of an orange grove knows the uses of various stocks for his orange plants and will discuss the advantage of sweet lime over sour lime or sweet orange and sour orange as alternative stocks. The lichee, a Chinese fruit now cultivated largely in certain parts of India, is propagated by a gootee, which corresponds to the form of layering in a pot or ball of moss called marcotage in this country.

The custard-apple and the bullock's heart or sweet sop are raised from seed; but the loquat is grown either from seed or by grafting. The rose-apple, *Eugenia Jambos*, is layered; and the jujube, *Zizyphus Jujuba*, is grafted; while the sapota or sapodilla, *Achras Sapota*, is in-arched like the mango. Sub-tropical and temperate fruits such as the fig, pineapple, apple, pear, mulberry, vine, plum, peach, strawberry and loganberry, are raised in India in much the same way that they are grown in this country.



THE METHOD OF PROPAGATION KNOWN AS MARCOTAGE.



# The J.P. SUPER

*"It is simple to adjust,  
easy-running, and the  
best all-round cutting  
machine I know of."*

—From a Head Gardener.

Mechanical excellence lifts the "J.P." right out of the rut of lawnmower construction. Labour-saving improvements make mowing easier, cheaper, cleaner than it has ever been before.

*Ask your Ironmonger or Seedsman for a  
Demonstration.*

Sole Makers:  
J.P. SUPER LAWNMOWERS LTD.,  
Meynell Road, Leicester.



**free—**

You will never know how much an Engineer-built Lawnmower can save you until you have had a copy of our free descriptive Booklet "V." Send a card NOW.

## GEMS for the GARDEN!

**GOLD MEDAL BEGONIAS.** Gorgeous Colours for Exhibition or Bedding Double or Single, Red, Carmine, Gold, White, Pink, Bronze, Lemon, 2/6 per doz.; 17/6 per 100, carriage paid.

**ANTIRRHINUMS.** Strong Bushy Plants, now ready. The Bride (pure white), Cottage Maid (pink), Golden Queen (yellow), Blood Red (dark crimson), will make a glorious show. 2/6 per doz. Smaller Spring Plants, 1/- doz.

**GERANIUMS! GERANIUMS!** Order early to secure good plants. Paul Campbell, Denmark, Raspail, Ivy, scented-leaved varieties, etc., 4/6, 6/- and 9/- per doz.

**PHLOX FLAME FLOWERS.** Lassberg (snow white), Lottie, Kohler (white, red centre), Iris (mauve), Rynstroom (large pink). Eclairer (carmine, salmon centre), Jean d'Arc (fine white), America (pink), Asia (rosy carmine), Eclair-vonde (blue), and many other fine varieties, 5/6 doz.

**PEONIES.** Full of flower buds. Pink, White, Red, Yellow, large clumps' 5/6 doz.

**ANEMONE JAPONICA.** Lovely shades, splendid for cutting, 2/6 doz.

**VIOLAS.** A Fine Selection, 2/- doz. Molesey Perfection, Archie Grant, Maggie Mott, Primrose Dame, White Swan.

**CALCEOLARIAS.** Golden Gem, a Special new Large Yellow type, fine plants' ex. 48s, 3/6 doz. Very bright bedding variety.

**FUCHSIAS.** We have a special fine line to offer in Double and Single varieties, all very strong bushy plants, 4/6 doz.

**MARQUERITES.** Single White, Double White and Yellow. Fine Plants, 3/- per doz. Also Blue Marguerite, 6d. each.

**POTENTILLAS.** 4/6 per doz., 6d. each. Orange and Scarlet, with large double blooms, resembling a glorified Geum.

**ROCK PLANTS.** A fine selection of Alpines for Rockeries. Sempervivum, Veronics, Aubrietia, Heuchera, Sedums, Thymus, Ajuga, etc., 2/6 doz. named.

**PENTSTEMONS.** Fine Strong Plants, fine mixed varieties, lovely colourings, 3/- doz.

**ALL 6d. per Lot:** 12 Asters (all varieties), 12 Stocks, 6 Sweet Williams, 3 Veronics (various), 3 Michaelmas Daisies, 3 Achillea tomentosa, 12 Sweet Peas, 3 Sedums, 3 Chinese Lanterns, 6 Arabis, 6 Variegated Grass, 2 Vinca, 1 Thalictrum (Hardy Maidenhair, large cup), 12 Marigolds (French), 10 Marigolds (African Tall), 3 King Edward Daisy, 1 Lilium candidum, 1 Lilium tigrinum, 12 Chrysanthemum Coranum (white and gold), 6 Scabious, 1 Red-hot Poker (4/6 doz.), 6 Alyssum, 6 Carnation-flowered Polys, 6 Nigella, 6 Mignonette, 12 White Lobelia, 12 Blue Lobelia, 2 Lobelia cardinalis, 4 Sunflowers (autumn single variety), 6 Double Yellow Sunflowers (Dwarf), 3 Nicotiana, 1 Heliotrope.

**VEGETABLE PLANTS.** 50 Cabbage, 6d.; 25 Cauliflower, 6d.; 50 Lettuce, 6d.; 4 Marrow, 1 Cucumber, 6d.; 6 Mint, 6d.; 6 Thyme, 6d.; 3 Silver Thyme, 6d.; 12 Tomato Plants, 2/6, carriage paid; Kondine Red, Ailsa Craig, Sunrise, Comet, M. J. Clarke's Masterpiece, a fine heavy-cropping variety (12lb. from 1 plant), Early Fruiting, 3/- per doz.

**EARLY-FLOWING CHRYSANTHEMUMS** (our speciality), Sanctity (white), Perle Chat. (gold, shaded pink), Normandie (rosy pink), Martin Reed (golden yellow), Almirante (old gold, shaded bronze), Polly (flame) and several other lovely varieties. 12 in 6 varieties, fine plants, named and carriage paid, 2/6.

**GREENHOUSE PLANTS.** No Heat Required. 1 Sparmania africanus, 1/9; 1 Abutilon Thomsonii, 1/6; 1 Kalanthus coccinea, 6d.; 1 Cyclamen, 6d.; 6 Tradescantia, silver or gold, 6d.; 1 Nice Strong Palm Cordyline, 1/-; 3 Bridal Wreath, 6d.; 6 Beautiful Ferns, assorted, 3/-. Post free.

**SALVIA! (Flamingo.)** A glorious new variety, large spikes of dazzling crimson blooms, and a continuous blaze of colour from June to October, 7/6 per doz.; Salvia Pride of Zurich, 6/- doz. With these grow *Centaurea candidissima*, a striking silver foliage plant, a charming contrast, 6/- per doz. plants.

Please give your full **ra:l** address, and when not stated carriage paid, please add extra to pay carriage. Orders from 1/- to 5/-, 6d. extra; 5/- to 10/-, 9d.; over 10/- please add 1/- extra.

Small parcels sent by Parcel Post. Do not fail to give correct address and nearest Station. This is a great help to us in despatching.

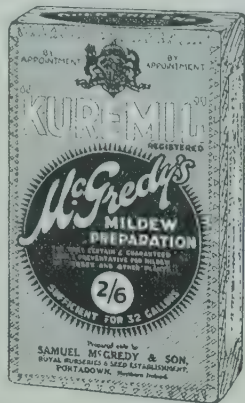
**CLARKE'S Royal Hampton Nurseries (Dept. 27.), HAMPTON, Middlesex**



# "KUREMIL"

(REGISTERED)

**McGREDY'S FAMOUS  
MILDEW PREPARATION**



2/6

Per

Pound.

1 lb.

makes 32

Gallons.

Guaranteed to cure and prevent mildew on Roses outdoors or under glass, and other plants subject to this disease. A certain cure also for black spot. NON-POISONOUS, safe and clean to use. Will neither stain nor injure BLOOM, FOLIAGE or FRUIT

## McGredy's "GOLD MEDAL" ROSE MANURE

The finest procurable—7 lb. 3/6; 14 lb. 6/6; 28 lb. 11/-; 56 lb. 17/6; 112 lb. 30/-.

IF YOU ARE UNABLE TO PROCURE EITHER "KUREMIL" OR "GOLD MEDAL" MANURE FROM YOUR LOCAL SEEDSMAN WE WILL SEND THEM CARRIAGE PAID.

Prepared only by—

**S. McGREDY & SON**

Nurserymen and Seedsmen to H.M. The King.

Dept. 5, PORTADOWN.

# LANDSCAPE GARDENING.

WM. BIGNELL & SONS have an efficient Staff of Landscape Experts, and are prepared to give advice on the formation of New Gardens, also for re-modelling and improving existing grounds.

The increasing popularity of Alpine, Dutch and Old English Gardens during the last few years has caused us to give our special attention to this class of work, and our great success in this direction is largely due to the Good Garden Service we are able to give.

We are always pleased to meet intending clients and advise on the formation or re-modelling of large or small Gardens, or Estates, in any part of the country.

Special Quotations will be given for the delivery only, if desired, of Sandstone Rockery, Walling Stone, Waterworn Mountain Limestone, York Stone Paving, Derbyshire Spar, Salisbury Rockery, etc.

## WM. BIGNELL & SON,

North Road Nurseries, HIGHGATE, N.6.

('Phone Mountview 2868)

NURSERIES also at SOUTH MIMMS.

## FOR ROSE ENTHUSIASTS.

## Roses, and How to Excel With Them

By R. V. GIFFARD WOOLLEY.

Illustrated. 2/6. Cloth 3/6.

"COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, London, W.C.2.

# THE 'PATTISSON' HORSE (LAWN) BOOTS

THE NEW (PATENT)

## MAJESTIC REVOLVING SPRINKLER

The simplest and most efficient Sprinkler for large areas.



Made in three sizes.

No. 1 waters 500 square yards,

No. 2 waters 1,200 square yards,

No. 3 waters 2,000 square yards,

without being moved.

Illustrated Price List, with Testimonials, from the makers—

**H. PATTISSON & CO., STREATHAM, LONDON, S.W.16.**

"The ONLY Economical Ones."

USED in the Royal and Thousands of the Principal Gardens, GOLF and CRICKET GROUNDS, and exclusively at the Oval (S.C.C.C.) for the past 20 years.

OVER 10,000 SETS USED IN THE U.K.



Fig. 1 for Shod Horses.



Fig. 2. Welted Boot.

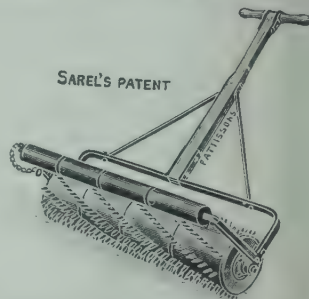
HUNDREDS OF TESTIMONIALS.

The Field says: "As good as anything that could be devised."

Mr. Wm. Hardy (Gardener to Lt.-Col. Hon. W. Guinness): "The boots supplied 17 years ago are still in use and have always been satisfactory."

## SAREL'S PATENT SPIKED ROLLER.

COMM. HILLYARD, R.N., The All England Lawn Tennis Club, Wimbledon, writes: "The 'Sarel' Roller is invaluable for aerating the ground. It saves an enormous amount of labour and is most beneficial to the turf. I should be very sorry to be without such a valuable implement."



SEE OUR

STAND AT CHELSEA SHOW.



# Eureka WEED KILLER

LARGEST SALE.

This Powder is far the safest and most satisfactory. Mixes readily, no sediment. Each tin is a measure. No leakage, no returns. If your agent does not stock, write to us and we will see that you get supplied at once.

**TOMLINSON & HAYWARD, LTD., LINCOLN.**

Original introducers of the double strength Weed Killer

All Agents stock both our Powder and Liquid Quality.



In garden practice the native gardener or *mali* uses all the wiles of his Western *confrère* to perpetuate plants which are shy seeders or which do not come true from seed. Cuttings are made where the subjects lend themselves to treatment in this way. Plants too tender to be treated in this manner are layered, but the method dear to the *mali's* heart is the gootee. In the rains it needs no attention, and, being a method of propagation little known to many Europeans, creates an interest in the *mali's* work which pleases him, and which may produce a tangible reward in the way of *backsheesh*.

The Arab in Mesopotamia is another exponent of the value of vegetative propagation. The date palm is almost always raised from offsets. True, the date contains a viable seed which, if sown, will give a date palm. The Arab applies to this the same term as to weeds, for the seedling palm is slow to fruit, and when it does eventually do so the dates are not the same as those of the parent tree. Many of the seedling palms will turn out male trees, bearing no fruit at all. The pomegranate is grown from cuttings, as also is the mulberry, to cite but two examples from the many which could be

mentioned from the trees in the gardens of Eden. The olive trees in the north of the country are grown from cuttings, as also are the white poplars planted in woods in the valleys of the Kurdish hills. So rapid is the growth of the poplars that the Turks taxed the plantations after the fifth year.

Thus we have, then, in the East and in the West the same methods of plant improvement practised. Generally the methods have been developed independently, but at times one can see an influence of West on East or East on West. The methods have been applied both in the East and the West as the needs of the peoples have directed. Seed selection has been applied to food crops in India, and the cultivator will tell which rice digests most slowly because by sowing it he will only have to eat once in the day. Fruit trees have been the object of special attention, and here vegetative propagation has been exploited by native methods differing in no respect from those used at home. That white settlers and planters have not applied these methods to economic crops which they grow is no ground for imagining that the native has similarly failed.

## FRUIT PROSPECTS IN 1925

FROM the point of view of fruit-buds and blossoms, it is many years since the fruit prospects were brighter than they are this year. Though many factors have to be considered after a plentiful supply of fruit-buds and later the bloom before a crop is assured, yet without this all others would obviously be useless for the year. There is therefore good reason to be hopeful about this year's fruit crops.

Plums, the latest varieties of which are in bloom here (Berkshire) as I write (May 9th), have been a wonderful sight.

Apples, the earliest varieties of which commenced to unfold their blossoms this week, fully ten days later than usual with us, are for the most part crowded with healthy flower-buds, and in a week or two should present a fine sight. Cherries, locally, appear to be flowering profusely. Pears by general consent are the least promising of the kinds named. It appears, however, to apply more to trained trees than to large standards. Trees on walls and fences are only blooming moderately, but the bigger trees in the open are much better, many trees being laden with flowers. Peaches flowered well in this neighbourhood, and have generally set good crops. Apricots, which are not, perhaps, so much grown now as some years ago, probably owing to the trees' bad habit of losing branches, are moderately cropped. Optimism prevails over bush fruit. Gooseberries, black and red currants are most promising, and the same applies to raspberries.

A close inspection of the strawberry quarters reveals a more cheerful prospect than was the case at one time. The plants did not look any too well during the continued wet weather of the winter and early spring, but they seem to have come along wonderfully this last month, and good flower-stems now appear fairly plentiful.

Though, as previously mentioned, flowers are of first importance, every grower of experience is aware that it is too early yet to count his chickens. There are the vital factors of pollination and weather to play their part—for or against—and the latter has a great bearing on the former. Pests, too, are always more or less liable to reduce a crop, but can be generally combated by watchfulness and application. Pollination is linked up with the period of blooming, since many varieties of apples, pears, plums and cherries have long since been proved to be sterile to their own pollen. Where mixed varieties are grown the danger of fruit not setting is, of course, very largely minimised. To ensure a set in such cases it is necessary to have other varieties blooming at the same time and the weather favourable for pollination. Honey bees, humble bees, other insects and wind will do the rest.

A close inspection of the plums gives one every reason to expect a good crop, for many varieties appear to have set. It is too early to be unduly optimistic. The weather, which plays such a big part in the setting, and raises or lowers the hopes of fruit-growers according to its vagaries, has up to now not been so bad. True, we have not had any very genial, warm days, and we have had slight frosts on several occasions, but against that is the fact that for the main part it has been dry, with, at any rate, occasional spells of sunshine. I have carefully noted the activities of the honey bees, and at every

sudden spell of sunshine, be it ever so short, they have appeared on the trees as if by magic, and were worthily upholding their character as busy bees. In their absence we have had the valuable assistance of humble bees, who are, fortunately, less particular as to weather. Very heavy hailstorms have been experienced in some localities, and in such places there must be apprehension as to the safety of the plum crop. On the whole I shall be somewhat surprised if the plum crop is not a good one and very possibly a bumper one.

Apples are flowering much later than usual. Records prove that many popular varieties, such as Cox's Orange Pippin, James Grieve, King of the Pippins, Worcester Pearmain, Bramley's Seedling, Lord Derby, Pott's Seedling and many others have been in full flower here between the dates of April 30th and May 10th. This year not one of those varieties has so far expanded any blooms with us, though, of course, a few fine warm days would bring about a transformation. In our fickle climate we never know when a catch frost may not come and do untold injury.

A careful watch for pests has not revealed anything serious to this date. A few caterpillars of the winter moth and aphides have been noticed on plum trees, with the addition of a few suckers on apple trees. This comparative freedom from attack may be largely due to grease banding and winter spraying with egg-killing washes. Last year fruit trees were wonderfully free from insect pests, following an unprecedented attack in 1923. Is it too much to expect a repetition of last year's comparative scarcity? No time should be lost in spraying the trees whenever the pests named are observed, providing the trees are not in bloom. This precaution is important, since, to be effective, a poisonous spray—such as nicotine or arsenate of lead—will have to be used for caterpillars and apple suckers, and the danger to our friends the bees when visiting the open blossoms of trees so sprayed would be terrible. The apple is subject to more pests than other fruits. In addition to those mentioned, the caterpillar of the codling moth, commonly known as the apple maggot, can do untold damage if present in numbers and unchecked. This moth lays her eggs in the eyes of the fruit, generally one to each fruit. As each moth may deposit over a hundred eggs, and these in turn produce as many caterpillars, and as each if allowed to continue its life would enter one apple, which it would partly or totally spoil, it does not need much imagination to realise the possible effect of this pest on the apple crop. No time should therefore be lost in spraying after the blossoms have fallen.

Gooseberries and currants are often injured by aphids much in the same way. This troublesome little pest invariably attacks the youngest part of a shoot, viz., the tip. It is often possible to control them by dipping the points of the shoots into a pail of insecticide, and is much more economical than spraying the whole tree.

In districts where late frosts are liable, the early blooms of strawberries are often ruined. In gardens it might be worth while strawing the plants early and netting the beds before the earliest and best blooms open.

ARTHUR J. COBB.



# SIMPLE GARDENING

## SUMMER SALADS.

**W**INTER and spring salads cannot be grown very successfully without the aid of frames, at least, and to secure a good succession and variety, heated structures are necessary. Salad plants like heat, but they fail to do well unless there is sufficient moisture as well. Given these conditions it is not difficult to grow good salads in the summer. But, unfortunately, such conditions do not obtain every year, so the cultivator must, then, make them artificially, as it were. The plants must be quickly grown to secure that fresh, crisp, succulent condition so much desired. Celery is always welcome, for flavouring as well as for eating. The earliest sticks may be grown in a frame. After clearing away winter and spring tenants, rather than allow a frame to remain empty, make up a bed of rich soil 1 ft. deep, plant celery 1 ft. apart, feed regularly and blanch by tying paper round the stems. Keep on the glass lights during the first few weeks to draw up the plants. Lettuce should be planted in a deep, rich soil, while quite small. It is a good plan, too, to sow seeds in drills and thin out the resultant seedlings to gins. apart; there is then no check. Ridge cucumbers should be grown on flat-topped beds of rich soil, and frame varieties in frames, keeping the lights almost closed and securing heat and moisture. Radishes require a medium rich soil and a good depth. Sow the seeds thinly and a few, only, every three weeks. Grow mustard and cress in very rich soil on the north side of a wall or fence, and tomatoes on the hottest side. Leave a few beets 2 ins. apart and thin them for use in August.

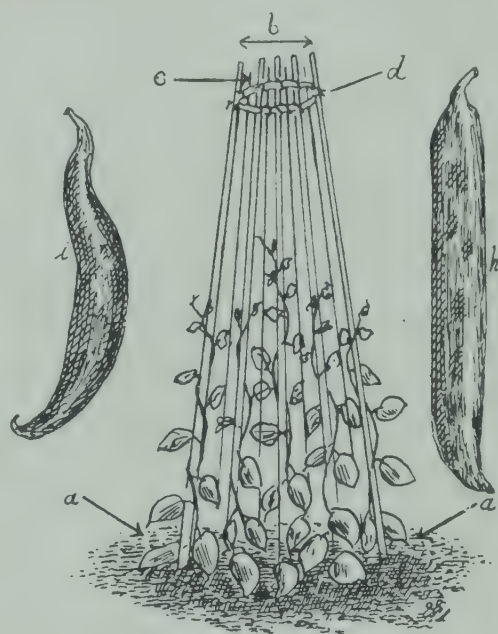
## PLANTING OUT CHRYSANTHEMUMS FOR LIFTING.

These notes are intended to be helpful, mainly, to those cultivators who love chrysanthemums but do not possess pots in which to flower them, nor time to attend to the watering of plants in pots. Each year I generally plant out and lift 1,000 plants, often more. They bear flowers from October to the end of January, under glass. The varieties include October, December and January flowering ones. They should all be planted now. A very rich soil is not necessary nor desirable; it should be of medium quality, so that the shoots will be strong, and short-jointed, not long-jointed and sappy. Having provided a rooting medium of this kind and, in due course, watered when necessary, feeding with liquid manure may be carried out according to the condition of the plants in August and September. Feeding will not be needed at any other time, save in exceptional cases. The stopping of the plants should be done about ten days before, or after, the planting. The last stopping of the shoots should be done not later than the third week in July, or buds lacking petals, normally, may result. As a guide to distance apart to plant, varieties growing 3 ft. high should be planted 18 ins. apart in the rows, and

the latter should be 3 ft. asunder. The rows are best running due north and south, to allow the maximum amount of sunshine to ripen the wood. In some quarters where no border is available, ridges of soil gins. high and 16 ins. wide may be formed and the plants put out in the usual way. Nearly all the soil will adhere to the roots when the plants are lifted and replanted under glass.

## STAKING RUNNER BEANS AND TREATMENT OF BUSH-GROWN PLANTS.

Runner beans, unstopped, grow very tall, and to stake them adequately would entail much labour and costly stakes. If the two last-named items are not important, then good staking may be the rule. There are several ways of placing stakes to the plants: in rows, with a stake to each plant; in clumps, with from three to nine stakes to each;



and with strong ordinary pea sticks. Some from preference, and others because stakes and sticks are too scarce, stop the plants and so treat them as dwarf bushes. There are many positions in gardens where clumps can be grown both for use and ornament. Such clumps should be, at the base, quite 3 ft. in diameter, as shown from *a* to *a* in the sketch, and, at the top, 18 ins. across, shown at *b*; a freshly cut stick, bent to form a hoop, will keep the stakes firmly in position, as shown at *c* and *d*. The point of the bush plant is stopped, when 1 ft. high, at *e*; resultant side shoots at *f, f, f, f*; later shoots, also, at *g, g, g, g*. This treatment makes the plants grow strongly. Well grown plants bear pods like the one at *h*; badly grown and neglected plants bear ill-shaped pods like the one at *i*.

## ST. BRIGID ANEMONES.

These flowers should be grown by all lovers of brightly-coloured blooms and handsome foliage. They are called St. Bridget as well as St. Brigid, the latter being mostly used; it is, I believe, a corruption of the former. It is often claimed for these plants that they will only grow satisfactorily in a light or sandy soil. I have tried them in various kinds, from light to sandy and from gravelly to clayey, and find the best results from a medium, well drained loam. In a sandy soil the foliage is dwarf, in a clayey soil it is medium in height and also the stems, but the flowers are richly coloured. In the medium heavy loam the leaves, their stems and the flowers are equally good. The plants are easily raised from seeds. The work is a very interesting one and, at a small expense, hundreds of plants can be obtained. The seeds may be sown in spring or autumn; those plants resulting from the former will flower the following winter and onwards; those from the latter, the next summer, late, and throughout the autumn and late winter. The seeds resemble cotton or thistle-down in its fluffy appearance, and it is well worth while spending a little time separating the seeds before sowing them. Sow thinly and cover lightly, using loam, two-thirds, and leaf-soil, one-third. The rough leaves grow from the stem just below the seed leaves and not from the axils of the latter; the seedlings, even, make many and long roots, so early transplanting, and in a deep soil, is advisable. If a cold frame can be devoted to a batch of plants, a rich harvest of blossom will be available in adverse weather in the winter.

## MAKING ARRANGEMENTS FOR SUMMER BEDDING.

After June 1st the work of bedding-out plants will begin, the hardier subjects being planted first, the most tender ones about the middle of that month. In the meantime it will be necessary to think about dealing with the bulbs and other spring-flowering plants that are to be kept through the summer for use again next autumn. A reserve border in the vegetable garden, or in some other quarter, should be dug ready for the spring-flowering subjects to be planted in. Then it will be necessary to consider the condition of the soil; it may need enriching with manure; if so, well rotted manure is the best to use. In some districts such manure is difficult to obtain, then old leaf-soil and decayed garden rubbish, especially that which has been burned in a smother fire, will prove very beneficial to the plants. Such kinds as zonal pelargoniums and petunias should be grown in a medium rich soil to obtain sufficiently strong growth, also plenty of blooms. Fine foliated plants should have a fairly rich rooting medium. Gold and silver-leaved plants must not be grown in a rich soil, or the variegation will be lessened. Count and allot the plants for each bed before any are planted.

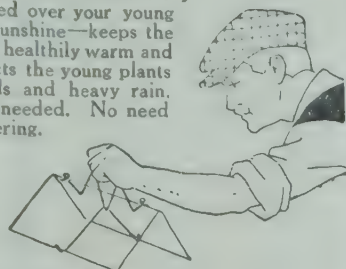
GEORGE GARNER.



# Do YOU waste Sunshine?

THE CHASE CONTINUOUS CLOCHE, placed over your young plants, traps the sunshine—keeps the atmosphere inside healthily warm and ventilated—protects the young plants against frost, birds and heavy rain. No transplanting needed. No need to remove for watering.

With the Chase Continuous Cloche



your plants mature more quickly and fully

For General Use send for this case of "A" pattern Cloches. Each Cloche 7ins high. Case contains 12 Cloches, covering 14 feet .. 18/-

For Larger Plants order "B" Cloches. 9ins. high. Set of 15, enough to cover 22½ feet .. 35/-



Carriage Paid Home.

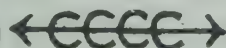
(Scotland 2d. in 1/- extra.)

than your neighbours', and are ready weeks ahead of theirs. You get big, fine crops, such as every gardener dreams of—not forced or coddled, but healthy and full-flavoured—just the sort of plants that you would get in the open under perfect growing conditions.

Write now for FREE BOOKLET No. 7. It contains a mine of useful information about the use of Cloches.

**Chase Continuous Cloche**  
*A Trap to catch the Sunbeams*

Dept. 7, Chertsey, Surrey



Please mention THE GARDEN when writing.

## KEEP A RECORD OF THE GLORY OF YOUR GARDEN

### MALBYS

The Horticultural Photographers

With half a century's reputation are at your service. Write for examples in colour or black and white from their unique collection.

19-23, Chelmsford Rd., London, E.18

Please mention THE GARDEN when writing.



Approximate length in yds. per reel.	Price per reel.
230 .. .. .	1/1
270 .. .. .	1/2
*320 (thickness of stout thread)	1/3

CASH WITH ORDER.

**KENT BROTHERS ELECTRIC WIRE CO. & E. H. PHILLIPS, LTD.,**  
15, Berners Street, Oxford Street, W.1. Horticultural Dept.: 43, Berners Mews, W.1. Telephone: Museum 8200.

## DON'T BE TROUBLED BY BIRDS!

— USE —

### KENT'S WIRE THREAD.

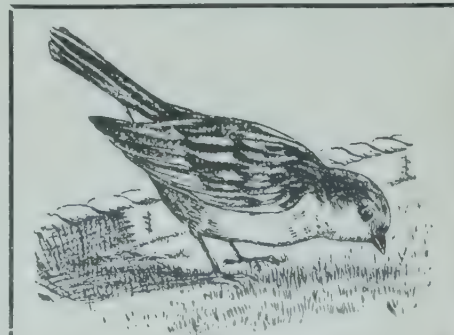
A NEW AND EFFECTIVE DEVICE for protecting seedlings, plants, and lawn seeds from BIRDS. Its tenacity and vibrating character unique for scaring purposes. It is covered with black weather-resisting composition. It is durable, inexpensive, and neat. It is supplied on reels and easy to handle.

Enquiries invited.

Special Terms to the TRADE.

Approximate length in yds. per reel.	Price per reel.	Approximate length in yds. per reel.	Price per reel.
420 .. .. .	1/4	*750 (thickness of medium thread)	1/9
510 .. .. .	1/5		
700 .. .. .	1/8		

Supplied in thicker and finer sizes if required.



## A Garden You'll Love

will be yours if you systematically use the famous "Ferry" Brand Garden Specialities. Your admiration will be won by the results—perfect roses and beautiful beds of flowers, dense, green and velvety lawns, etc. "Ferry" Specialities will help you to have a garden you'll love.

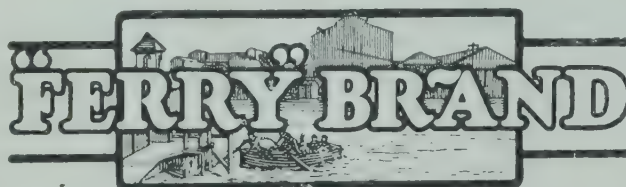
**FERTILISERS** for all flowers and produce. Guaranteed Analysis. Special "Ferry" Brand Garden Manure, 14-lbs. 3/-; 28-lbs. 5/9.

**LAWN SAND.** Destroys all weeds; acts as fertiliser to grass. Non-poisonous. 7-lbs. 3/-; 14-lbs. 5/6

**WEED AND WORM KILLERS.** WEED KILLER in two forms. Liquid—1 gal. 8/-; Powder—to make 25 gals. 4/3; POWDER WEEDER—14-lbs. 5/6; WORM KILLER—in two forms—Liquid, to make 25 gals. 5/3; Powder—28-lbs. 6/6

**INSECTICIDES & FUNGICIDES.** "Ferry" Soil Pest Destroyer, 14-lbs. 3/-; "Ferry" Winter Wash—(Sulphur and Caustic) 1-gal. 7/-; "Ferry" Winter Wash—(Liquid Soap) 1 gal. 7/6; "Ferry" Disinfectant—For all Household Purposes, Poultry Houses, Dog Kennels, etc. Non-poisonous and reliable. 1 gal. 7/6

Larger quantities at reduced prices. Write for lists and free advice.



"TRY  
'FERRY'  
FIRST."

**THE BRITON FERRY CHEMICAL & MANURE CO. LTD.,**  
BRITON FERRY, SOUTH WALES.

(Established 1886).



# Abol The Standard Plant Wash

Abol Non-poisonous Insecticide is a sure-kill for Green and Black Fly, etc., and is unequalled as a remedy for Mildew on Roses and other plants. It imparts health and vigour to the plant, and leaves the foliage beautifully clean and fresh.

Abol is perfectly safe to use on all flowers, fruits and vegetables, and will not harm the tenderest plant; has no unpleasant odour and will not damage paintwork.

## Abol Non-poisonous Insecticide

Used in the Royal Gardens.

$\frac{1}{2}$ -pt., 1/4; pt., 2/2; qt., 3/4;  $\frac{1}{2}$ -gall., 5/3; gall., 9/6.

Write for descriptive folders to Nurserymen, Seedsmen, Florists, Ironmongers, Chemists and Stores.

In the event of any difficulty, please write direct to the Sole Proprietors and Manufacturers, Abol Limited, 9, Beltring, Paddock Wood, Kent.



Write for Guide to Garden Pests, Gratis and Post Free.

## The Syringe with the Perfect Spray

Abol Patent Syringes give a perfect mist-like spray—strong, yet so fine that it does not fall at once to the ground, but hangs in the air, and so envelops the tree or bush. The spray may be varied from fine to medium or coarse, as desired.

No. 4 (1 x 14), 16/4  
No. 5 (1 x 20), 21/-  
No. 6 (1 $\frac{1}{4}$  x 20), 26/-

Bend attachment, for directing spray to undersides of leaves, not included, but extra 1/6.

# Abol

## Patent Syringes

Specially recommended by the National Rose Society.

THE ORIGINAL AND LEADING FUMIGANT



## "WEED DEATH"

The new NON-POISONOUS Weed Killer Powder. Equally as effective, if not more so, than the dangerous Arsenical Compounds, and cheaper—Kills the Roots. Tins 1/- 2/- 3/6 6/6 12/- and in bulk. Sufficient for 4, 12 $\frac{1}{2}$ , 25, 50, 100 gallons. Obtainable from your Nurseryman or Seedsman. CORRY & CO., Shad Thames, London, S.E.1

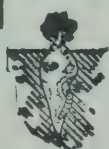
## "The Garden Beautiful"

No garden can be truly beautiful where the plants are sickly and starved. Therefore dress it well with Nitrate of Soda, in conjunction with Phosphates and Potash.

Write for special pamphlets, entitled, "Successful Gardens for Every Amateur," "The Manuring of Orchards and Fruit Trees," supplied gratis and post free by THE CHILEAN NITRATE COMPANY, Friars House, New Broad Street, London, E.C. 2.

# Nitrate of Soda

## KILOGRUB



Exterminates all Garden Pests in the soil. Your Seedsman has it. Tins:—9d., 1/6, and 2/6. Bags:— $\frac{1}{2}$ -cwt. 6/6;  $\frac{1}{4}$ -cwt. 9/6; 1-cwt. 15/-. Write for particulars to the manufacturers:—JOHN PEAK & Co., Ltd., Wigan, Lancs.

## SOIL PESTS DESTROYED

by "ALPHOL" Sample 14 lb., 3/6 carr. paid

Write for particulars of this and other reliable Garden Helps, Lawn Improvers, "Veribest" Seeds, etc., to

Garden Supplies, Ltd., Cranmer St., Liverpool

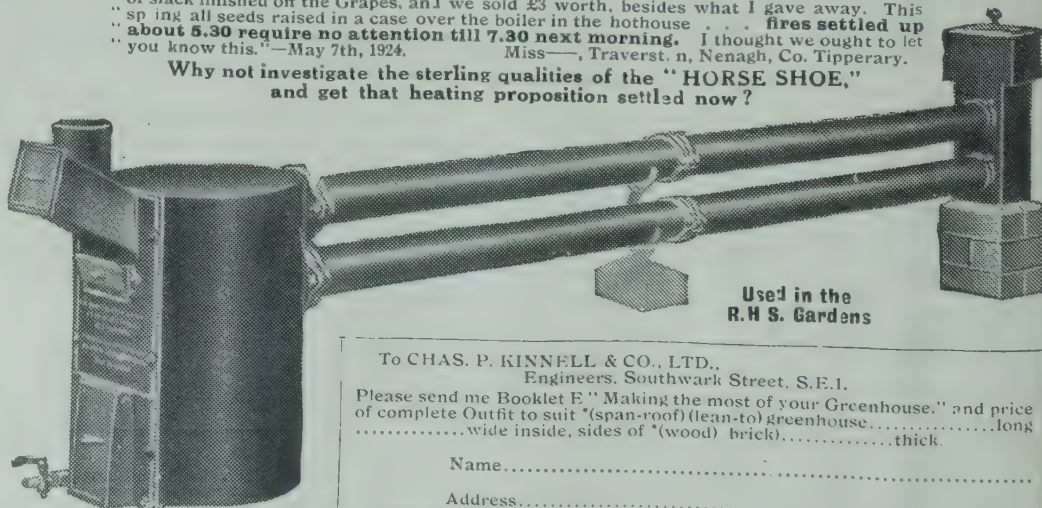
"NEVER WORKED SUCH A SATISFACTORY AND ECONOMIC GREENHOUSE HEATING APPARATUS AS YOUR

## 'HORSE SHOE' BOILER"

WRITES ONE OF THE MANY ENTHUSIASTIC OWNERS.

"I have two, one heating a long Vinery and one a little Hothouse. Last autumn 12/- worth of slack finished off the Grapes, and we sold £3 worth, besides what I gave away. This spring all seeds raised in a case over the boiler in the hothouse . . . fires settled up about 5.30 require no attention till 7.30 next morning. I thought we ought to let you know this."—May 7th, 1924. Miss—, Traverst. n, Nenagh, Co. Tipperary.

Why not investigate the sterling qualities of the "HORSE SHOE," and get that heating proposition settled now?



Used in the R. H. S. Gardens

To CHAS. P. KINNELL & CO., LTD., Engineers, Southwark Street, S.E.1.

Please send me Booklet F "Making the most of your Greenhouse," and price of complete Outfit to suit (span-roof) (lean-to) greenhouse . . . long . . . wide inside, sides of (wood) (brick) . . . thick.

Name . . . . .

Address . . . . .

\*Strike out particulars not needed. Cut out and send by  $\frac{1}{4}$ d. post.

Wire: "Kinnell-Boroh-London."

CHAS. P. KINNELL & CO., LTD.  
65, SOUTHWARK STREET, LONDON, S.E.1

Phone: Hop 362 (Three lines).

Please mention THE GARDEN when writing.



## CORRESPONDENCE

## PLANT HUNTING.

SIR,—As an old hand at the game of plant collecting in Switzerland and elsewhere, I have greatly enjoyed the two recent articles of Mr. Stuart Thompson, whose books I have used on such expeditions since 1912—with these, and Farrer, one can usually know what to expect and what it will look like. Hegi's "Flora des Mittel-Europa," is useful later in deciding the finer points of species differentiation, but too bulky to carry, of course; and Schroeter's "Pflanzen leben der Alpen" (now being republished, and sorely wanting translation), helps to pass the winter months and clear the mind on many subtle points of growth and habit.

Your editorial of May 9th is a useful supplement to these two admirable articles, but there are several points of warning that should still be brought to your readers' notice. Firstly, collecting should be meticulously sparing. I do not think there is any justification for taking plants which can be obtained cheaply and in good condition from many nurserymen in this country (I speak for amateurs), except in cases where outstandingly good forms are found, or unusual colours. It should be remembered that it is most often quite futile to try to extract long tap roots from crevices of the living rock, when a little farther up the slope a possible patch of scree or shale will provide compact rooted seedlings. It is sheer murder to take *Viola cenisia*, *Saxifraga florulenta*, *Eritrichium nanum* and the higher androsaces.

Secondly, the collector should endeavour to keep within the laws of the country where he takes his plants and not outrage local feeling by his depredations. In the Engadine there is a very large list of forbidden plants; in France one cannot use parcel post. Customs officials are often Fascisti. In the Maritime Alps collectors are not, or were not, popular; to quote from Saint Yves' monograph on the distribution of *Saxifraga florulenta* (Nice, 1907), "A Bavarian nurseryman spent seven weeks in August, 1903, collecting thousands and thousands of roots of the precious saxifrage. . . . Moreover, this is not an isolated fact. In 1897 a collector of Limone was instructed to send to an English firm a thousand bulbs of the very rare *Fritillaria Moggridgei* and *F. tubæformis*. . . . the Pyrenees have also been the scene of similar devastations. About 1884 an English firm had instructed guides and porters from Gavarnie, to procure the greatest possible number of bulbs of the magnificent *Narcissus cernuus* Salisb., which grows on Mont Perdu. The number of bulbs sent would have been, apparently 30,000. . . . This odious traffic only came to an end when the Spanish shepherds, jealous of the profit thus made from their territory, welcomed the folk from Gavarnie with gunshot." One does not often meet such a reception; and in many places there are guides who make a point of showing off the local rarities. But for other reasons one has to be careful in wandering about frontier valleys and ridges. One may be taken for a smuggler, or a spy. To quote Ball, speaking of the Tenda district, "Travelers are regarded on both sides of the frontier with the greatest suspicion, and certain passes and summits are absolutely closed to them. . . ."

Sketching, photographing, taking notes or mapping, as well as any conversation with natives . . . should be most carefully avoided under pain of disagreeable consequences . . . etc." This was pre-war, of course, but how true is it now? We do require trustworthy information on this and local regulations regarding collecting and despatching plants.

Ones difficulties do not cease on reaching England. I am at present conducting an

unsatisfactory correspondence with the Ministry of Agriculture over the question whether alpine plants sent from abroad must be accompanied by a certificate of health. Their powers under the Destructive Insects and Pests Order of 1922 are apparently ill-defined and in practice unlimited. The penalty is £10 and confiscation, but penalties are rarely enforced.

Plants brought back to this country, however packed, must be treated as surgical cases and given careful nursing. My own practice is to have a frame filled to within 2 ins. of the glass with sharp sand, in full sun, and to put everything received into this, keeping close and watering frequently, until the chlorophyll comes back to the etiolated leaves and new roots push out. It is vigorous, even brutal, but successful, and the frame can be used without alteration for striking cuttings. Small and well rooted plants, after hardening,

each with their own typical species, which hybridise in the wildest fashion along the join; *Rhododendron hirsutum* crossing in infinite gradation of dominance with *R. ferrugineum*. One valley is yellow with *Anemone sulphurea*, but cross the ridge and the slopes glisten with *A. alpina*. High alpine save you the trouble of climbing to see them by growing engagingly in torrent beds thousands of feet below their proper level.—H. T. DENHAM (M.A.), Wilmslow.

## THE SNOWY MESPIUS.

SIR,—The *amelanchier* family is a small one consisting of only four species, although the number of names under which it appears in catalogues is legion. The four species are *alnifolia*, *oligocarpa*, *vulgaris* and *canadensis*. All are natives of Canada or Northern United States, so should be quite hardy in this country, and it is surprising that this



A FINE OLD SPECIMEN OF THE SNOWY MESPIUS (AMELANCHIER CANADENSIS).

go out into the garden; larger clumps are re-divided and kept in cold frames, by way of reserve; for these newcomers sometimes exhaust themselves in their efforts to settle down, and fail to cope with our wet, warm winters. It is always a moot point whether one should leave flowers and seed pods on the collected plants. I think not, though I have, on occasion, saved both mother and child.

As regards apparatus, I prefer a rucksack and I find an ice axe a useful adjunct to the flat trowel—hardened climbers shudder and turn away at the sight of the strange uses it is put to. Numbered tags and a notebook are more practical than writing direct on a label—more room and easier writing.

The list of place names given by Mr. Stuart Thompson omits one little *Paradisus in Sole*, in Les Plans, above Bex (Vaud). Apart from the really exceptionally good alpine garden run by the University of Lausanne, the flora is good; granitic and limestone meet,

ornamental tree should not be more commonly seen than it is at present. Being of moderate size and graceful form, it is suitable even for small gardens where there is no great space for large trees, while the profusion of white blossom in April can be seen in the illustration. Not only is it beautiful in the spring, but also in the autumn it gives an almost more wonderful display owing to the gorgeous colouring of the leaves before they begin to fall. The tree shown in the illustration is in the garden of Sir Benjamin Bromhead at Thurlby Hall, near Lincoln, and is a very old specimen of *Amelanchier canadensis*, or *snowy mespilus* as it is generally called. Although it is correct to write "is," perhaps "was" would be a better definition, for, although the tree is still alive and sending out fresh growth from the old stem, unfortunately since this picture was taken storms have played havoc with the boughs and to a large extent have spoilt the central object of this old-world garden corner.—F. H. H.



## AN INTERESTING DAHLIA.

SIR,—I send details of a dahlia that is in full bloom, thinking it may be of interest to the readers of THE GARDEN. It is of the Yellow Celoise variety, small bulb and grown in a greenhouse at Fingest, Bucks, and the bloom measures 6ins. across and the petals 2ins.—A. E. BOYLES.

## DIGGING AND TRENCHING.

SIR,—I would like to be permitted to confirm Mr. Edwin Beckett's advocacy of trenching very clayey soils late in winter rather than in the autumn. I did the latter in dealing with some clayey ground, many years ago, with a view to being up to time with the work. A rainy winter followed, and I had the work to do again; the soil was then a paste early in spring, and it did not "work" kindly throughout the summer. The crops did not thrive, and I learned a valuable lesson. Now, I prefer to form rather high ridges if I am obliged to work such soil in the autumn. A neighbouring farmer experienced the same difficulty. He remarked to me one autumn, "I have ploughed my clayey field; if the weather is dry I am right, if it comes wet I am wrong." It came wet and he found more trouble.—G. G.

## VIBURNUM CARLESII.

SIR,—It puzzled me to read in THE GARDEN of May 2nd Mr. Stern's encomium of *Viburnum bitchuenense*. It must surely have been through a slip of his pen that he extolled it higher than *V. Carlesii*. I have not his note before me, but since reading it I have examined plants of both species, only to be confirmed in regarding *V. Carlesii* as the choicest of the deciduous species, and *V. bitchuenense* as not worth growing at all. Mr. Stern credits the latter with pink flower-buds, whereas I have never seen them as other than white; but in *V. Carlesii* they contrast beautifully with the snow white expanded blossoms.

Most of the plants of *V. Carlesii* supplied by nurserymen are grafted on *V. lantana*. It requires incessant vigilance to prevent shoots from this irrepressible stock overpowering the scion, especially as the foliage of the two species closely resemble each other.—HERBERT MAXWELL, *Monreith*.

## THE BALSAM: A PLEA FOR AN OLD FLORISTS FLOWER.

SIR,—Will you allow an admirer of a very charming annual, but one which has long since lost its popularity, to enter a plea for restitution and better recognition of the balsam? It is seldom, indeed, that one now meets with it, and it is no exaggeration to say that by the large majority of gardeners of the present time it is quite unknown. Time was, however, when in most establishments the order for seeds to be sown in spring included a packet of this—when well grown—very pretty flowering plant. I venture to say that one of the reasons why it lost ground was because, unlike so many other subjects, the blossoms were useless for cutting: could only be admired, in fact, and, therefore, in many places, this, one of the oldest of florists' favourites, was dropped. I am sometimes told that it is no use in these days growing flowers that have no value for cutting; but to me, at any rate, this seems an altogether too sweeping assertion. One might as well deprecate the culture of gloxinias, cyclamens, begonias—to name a few—that no one would dream of using as cut flowers, yet would not be without such plants that add beauty to a house. As greenhouse tenants, however, it is seldom that one meets with balsams. Occasionally I have noticed an odd plant or two in some cottager's window—an indication, at any rate, that

interest in this annual is not quite extinct. One has a recollection of their being found on exhibition tables in the 'seventies, grown in 8in. pots under generous conditions in regard to compost, which was made up of old loam, leaf-mould and sharp sand, with an addition in the shape of some old cow manure. In a genial temperature balsams were shown with stout stems with plenty of lateral growth full of waxy blossoms, the pride of many an old florist of bygone days. I am not advocating a return to abnormal culture of so pretty an annual by finally shifting plants into pots one is accustomed to see chrysanthemums occupy, but to a revival of interest in a plant which, grown under ordinary conditions found under a greenhouse roof, and bloomed, say, in 5in. pots, merits praise when the beauty stage is reached. It was only a year or two ago that, in passing a house in the windows of which were flowering plants, someone remarked, "Isn't that beautiful?" and, almost in the same breath, "Whatever is it?" It happened to be a well bloomed specimen balsam which excited my friend's curiosity. It seems to me that we are losing much to-day in allowing its culture to lapse, and I therefore enter a plea to those who have only, maybe, had a negative interest in this delightful annual, to become better acquainted with it.—W. LINDERS LEA.

## OBITUARY

## RICHARD PINCHES.

WHEN a man who was never a horticulturist and took no pains to conceal the fact becomes an active participant in the most prominent and important movements for horticultural progress, not by reason of his own tactics, but because of the spontaneous and appreciative welcome and urgent request from all quarters, he is, assuredly, a man of no ordinary character, a man whose worth one appreciates but never attempts to estimate.

Richard Pinches was widely known all Britain over, and wherever he was known he was not only esteemed but loved. "Pinches of Acme labels fame" has been a familiar phrase, but it was but a mere tab of identification, for in business life alone he has conferred upon nurserymen, exhibitors and floral artists benefits in a host. A long-felt or a new-found need had only to be explained to Richard Pinches and his fertile brain and mechanical ingenuity were immediately concentrated upon meeting that need, and always with greater concern for the assistance of a friend and the advancement of horticulture than for his own benefit. The graceful and pleasing arrangement of the flowers at Chelsea Show this week is in large part due to equipment conceived and designed by Richard Pinches. Still, the greatness of the man rests even more surely upon his ungrudging services on committees of well nigh all the floral and horticultural societies that meet in London, where his foresight, mental vision and wise counsel have times innumerable helped to achieve successes, and frequently to steer the barque of some society through troubled waters. Beyond and above all this, his personal friendship has been a blessing to a vast number of Fellows who had the good sense to confide in Pinches and seek his advice. Richard Pinches was proud of being a Londoner, but much of his early life was spent in the provinces. His natural endowments were admirably developed by a sound education and early association with men of character and accomplishment. At one time a master at Chester's illustrious School of Art, he later devoted himself to commercial art in Norwich,

where he was designer and draughtsman to an important furnishing house.

**Edinburgh Royal Botanic Garden Guild.**—The members of this Guild have arranged to hold a meeting in the Lecture Hall of the Royal Botanic Garden on May 20th, 1925, at 7 p.m., with the object of reviving the interest in and arranging for the continuance of the Journal of the Guild. Mr. A. McCutcheon, the secretary (pro. tem.), would be pleased if all old members would endeavour to be present. He would also be glad if members of the Guild who have changed their addresses since the publication of the last Journal would let him know their present addresses for inclusion in the next issue of the Journal.

**The Iris Society.**—In May, 1922, a small gathering of iris enthusiasts met together in London to welcome Mr. J. C. Wister (President American Iris Society), M. S. Mottet and other Continental visitors. At this meeting the idea of a British Iris Society was proposed by Mr. R. W. Wallace, and on October 4th "The Iris Society" came into being. Many interesting papers have been read at the Society's meetings, but apparently these were not published. During 1924 the Society seems to have largely increased, and the first Bulletin is now to hand. This deals chiefly with the cultivation of bearded iris in different parts of the country, and we note articles by some of the leading experts, as Sir Arthur Hort, Mr. W. R. Dykes, Mr. G. Yeld, etc. The Hon. Secretary, 25, Bower Mount Road, Maidstone, informs us that he has a few spare copies of this Bulletin which he will be pleased to send to our readers, gratis, and application should be made direct to him. We hear that Bulletin No. 2 is shortly to be issued, and contains articles of special interest by American and Continental experts. We are glad to note that this Society has realised the urgent necessity of dealing with the classification and nomenclature of iris in commerce, and the first step has been taken towards this somewhat difficult task by co-operation with the Royal Horticultural Society, whose Council have arranged for iris trials to be carried out at Wisley. A joint committee of the two Societies has been set up, and a large number of the leading varieties has already been planted at Wisley. We think that those interested in Irises would do well to get into touch with this useful Society; and we hear that the annual subscription is 10s. 6d.

**A Cup for Peonies.**—Peonies are so comparatively easily grown that it is a matter of surprise that they are not more largely used in our gardens than appears to be the case. In America their value has been realised for some time, and there seem to be many enthusiasts who cultivate a great number of varieties. Among them the best known is Mrs. Edward Harding, who published in 1917 "The Book of the Peony" and, more recently, in 1923, a smaller volume on "Peonies in the Little Garden." So convinced is Mrs. Harding of the value of peonies for garden decoration that she has presented to the Royal Horticultural Society three cups to be awarded for exhibits of these flowers. The first is offered for competition at the R.H.S. Show on Tuesday, June 9th, 1925, for the best exhibit by an amateur of three flowers each of six varieties of peony. Medals will be awarded as the second and third prizes if the exhibits are considered to deserve them. It is hoped that Mrs. Harding's generous offer will encourage a keen competition among amateur growers of peonies.

Entries should be received by the Secretary of the Royal Horticultural Society, Vincent Square, London, S.W.1, not later than the first post on the morning of Wednesday, June 3rd, and all exhibits must be staged not later than 11 a.m. on the morning of Tuesday, June 9th.

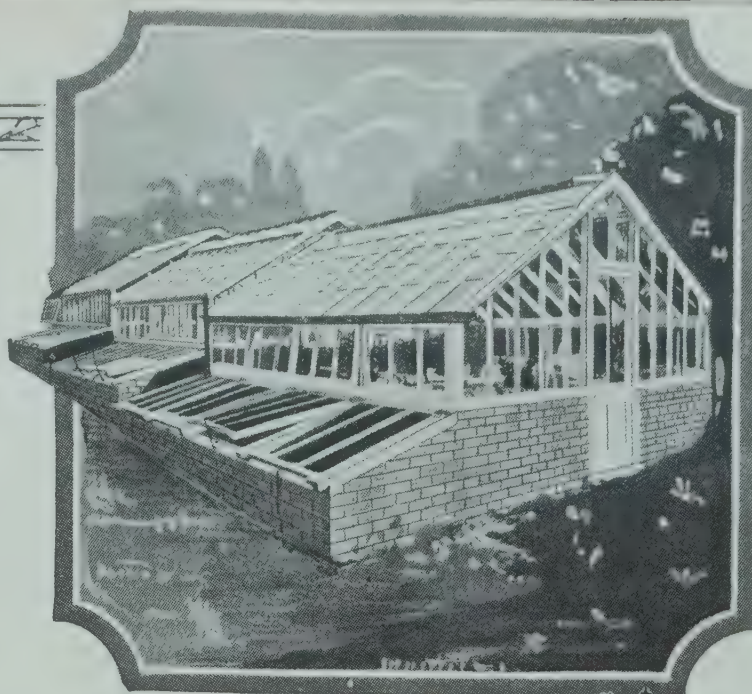


# Glass House Building

THE building and designing of Glass Houses is a highly specialised work—that is, if the structure is to be correctly designed and built to last.

In dealing with the firm of Duncan Tucker & Sons, Ltd., you are obtaining the combined experience of many years devoted exclusively to the erection of every form of Glass House ranging from the modest "Lean-to" to the expansive Winter Garden.

Whether your enquiry is for renovating an existing Glass House or designing a new one you will receive the same courteous and prompt attention.



If you are contemplating the erection of a Glass House we should be glad to send you interesting and helpful literature to aid you in your choice of a suitable structure.

**Wm Duncan Tucker & Sons Ltd.**  
ESTABLISHED - 1830  
TOTTENHAM, N. 15.

Gilbert Ad. 2918.

## ORCHIDS—Imported or Established

A list with full treatment showing how these wonderful and interesting plants may be grown even in a mixed greenhouse by any Amateur.—Free on application to

ANSELL & HATCHER, Ltd., Rawdon, YORKSHIRE

## FERTILISERS.

LAWNS, 20/-; FRUIT TREES, VINES, 19/6;  
GENERAL GARDEN USE, 17/-;

WORM KILLER, newly introduced, 19/-  
Per cwt., carriage paid. Also all other fertilisers.

**HY. RICHARDSON & CO.,**  
Skeldergate Bridge Works, YORK

## MATTHEWS' BIG PRODUCTION FERTILISERS

MATTHEWS' HIGH GRADE HORTICULTURAL FERTILISER  
COMPARE ANALYSIS

MATTHEWS' HIGH GRADE TOMATO FERTILISER  
COMPARE ANALYSIS

THOUSANDS OF TONS SOLD ANNUALLY

	Ammonia	Phos.	Potash	lbs.	cwts.
<b>MATTHEWS' HORTICULTURAL</b> For POTATOES & GENERAL GARDEN use.	7%	21%	4%	14 28 56 1 2	3/3 5/9 10/9 20/- 37/6
<b>TOMATO</b> All are "MAXIMUM CROP" COMPLETE MANURES essential FOR ECONOMIC SUCCESS.	9%	21%	6%	3/6 6/6 12/-	22/6 42/-
<b>LAWN</b> NOTE—double value compared with some that are sold.	4%	25%	2%	3/- 5/6 10/-	18/6 34/-
Bone Charcoal ...	1.5%	67%	—	2/9 5/- 9/-	16/6 30/-
Bone Meal, English, Best ...	4.5%	45%	—	2/9 5/- 9/-	16/6 30/-
Basic Slag ...	—	30%	—	1/6 2/9 4/9	7/6 13/-
Bone Flour, Steamed ...	1%	60%	—	2/3 4/- 7/-	12/6 24/-
Fish Manure ...	10%	14%	—	3/6 6/6 12/-	22/6 42/-
Garden Salt ...	—	—	—	1/6 2/9 4/6	8/- 14/-
Hoof and Horn ...	16%	—	—	3/6 6/6 12/-	22/6 42/-
Kainit ...	—	—	14%	1/6 2/9 4/6	8/- 14/-
Lime, Ground Carbonate, Superfine ...	—	—	—	1/6 2/6 4/-	6/6 12/-
Meat and Bone Meal ...	8.5%	18%	—	3/- 5/6 10/-	18/6 34/-
Meat Meal ...	8%	30%	—	3/6 6/6 12/-	22/6 42/-
Nitrate of Soda ...	18%	—	—	3/6 6/6 12/-	22/6 42/-
Peruvian Guano ...	14 3/4%	22%	2 1/2%	4/- 7/7 14.3	27/- 51/-
Sulphate of Ammonia. 21% Nitrogen ...	25.75%	—	—	3/- 5/9 11/-	21/- 39/-
Sulphate of Potash ...	—	—	50%	3/2 6/- 11/3	21/- 39/-
Superphosphate ...	—	35%	—	1/8 3/- 5/3	9/6 18/-

**MATTHEWS' HIGH GRADE TOMATO FERTILISER**  
COMPARE ANALYSIS

**MATTHEWS' LAWN SAND**

Effectively kills all the common weeds in lawns, and at the same time acts as an excellent Fertiliser. Sprinkle evenly over the weedy patches, at the rate of 3-ozs. per square yard, in dry weather. Repeat at intervals of a few weeks, till the weeds are killed. The grass will become brown and appear to be burnt, but it will recover, and the useful grasses will grow more vigorously.

4/- 14lbs. 6.6 28lbs.  
10.9 56lbs.  
20/- cwt.

**PROFITABLE GROWING IN 1925**

EXHIBITION & PROFIT

**MATTHEWS' "Maximum Crop" GARDEN SEEDS**

**SCOTCH SEED POTATOES**

Choice Flower Seeds  
Finest Spring Bulbs

Write for Catalogue  
IT WILL PAY YOU

CARRIAGE PAID on orders to the value of 5/- upwards to the nearest station in the United Kingdom  
ESSEX RESIDENTS 1/6 per cwt. less.

**JAMES & GEO. H. MATTHEWS,** Head Office: **HAROLD WOOD, ESSEX**  
And at COLCHESTER, ONGAR, BRENTWOOD, CHADWELL HEATH, WICKHAM BISHOPS and BRIGHTLINGSEA

Phone: ROMFORD 284



## BOOK REVIEWS

'Rock Gardening,' by W. Irving. (Published by *Country Life* Limited, 20, Tavistock Street, London, W.C., price 2s. 6d.)

THIS excellent little book is a model of conciseness. Mr. W. Irving, the author, is, of course, the well known Curator of the Alpine and Herbaceous Department at Kew, and therefore an acknowledged authority on rock gardening. The trouble with great authorities on special subjects too often is that they know so much that they are unable to realise how little the beginner may know. But Mr. Irving has seized on those first simple essentials of rock gardening which the beginner must master, and has set them out clearly, concisely, and so that they may be grasped and followed without difficulty. Chapter I deals with such subjects as "Selection of Site," "Materials for Construction," "The Rock Border," "The Moraine" and "Wall Gardens." Then follow sections on Cultivation, Soils and Propagation. There is a brief chapter on The Alpine House and Frames, and another on the Rock Garden in Winter. The whole thing, brief though it is, is exactly what the beginner requires—a masterpiece of elimination of non-essentials.

Chapter V, "Plants for the Rock Garden," is on the same lines. The main families are taken alphabetically, and from each family—primula, saxifraga, campanula, and so forth—the author has skimmed the cream—the most beautiful and growable, and given brief descriptions and helpful hints on culture. Fortunately, no attempt has been made to enumerate any such arbitrary absurdity as "the hundred best alpine"—of which, of course, there are at least five hundred—or more—or less. Lots of good things are left out, but plenty are given—plenty for the beginner to be "getting on with."

The printing and general get-up of the book, as also the illustrations, are of the high order one has come to expect from the *Country Life* Press, though it is unfortunate that the picture of the "Bird's Eye Primrose" should be a bird's-eye view of the plant. Through excessive foreshortening the grace and port of the plant are almost wholly lost.

CLARENCE ELLIOTT.

"Vegetable Growing," by George Garner. (Published by *Country Life*, Limited, 20, Tavistock Street, W.C., price 2s. 6d.)

MR. GEORGE GARNER'S volume on "Vegetable Growing" may well be summed up in the words *multum in parvo*, for within the confines of the small space at his command he has dealt briefly with most of the matters appertaining to vegetable growing, and the publication of this new number of *Country Life's* "Half-crown Gardening Books" is likely to be much in demand in the near future, once it gets well known. Needless to say, within the space of seventy-three pages the finer points of the cult cannot be adequately dealt with; in fact, the author has had to condense very much some of his phrases, in a manner which makes the book almost a synopsis of the craft; but it will unquestionably resolve itself into the *vade mecum* of the allotment-holder and the owner of a small garden, for the information is well grouped, concise—nay, almost pithy; and the size of the volume permits it to be slipped into a side pocket, without being at all cumbersome.

A critical reader will perhaps fail to agree with some of the instruction: for instance, we rather regret that he does not more insistently urge the inversion of soil at the time of trenching, and we prefer to defer this operation until late winter and early spring on the clay grounds, rather than do it in autumn as he suggests; nor do we quite like the instructions as to the placing of manure, for in some instances it appeals as being too close to the roots of plants,

which are better if they have to labour for their sustenance. On cultural hints we would draw the author's attention to one or two minor points: for instance, he deals with mustard sowing in boxes, but omits this reference for cress. Onions, again, when lifted for storing, should, weather permitting, be left on the ground and turned every third day for ripening, finishing off under glass if necessary and possible. One little suggestion of manuring for a root crop might be misunderstood, for, while it is intended for, we should say, extra poor soil, yet we dislike special manuring for root crops as having, if sowing takes place too soon after, a tendency to damage the roots through forking occurring.

We must draw attention to a rather bad error—probably only a case of overlooking, but it should be corrected in the next edition, which we anticipate being soon required—page 46 details ground preparation for potatoes, and says "if of a clayey nature fresh manure should be put in," but this is contradicted on page 67 by the words "avoid the use of very fresh manure in autumn on stiff soils."

Another minor point, page 47, details wisps of straw to be drawn through the potato clamp ridge (surely better to do this on the sides to prevent rain percolation!) every 5ft., while on page 51 the measurement is given as 4ft.; but either may be considered good.

Varieties selected by Mr. Garner are a really useful lot, though we are sorry to note the omission of Quite Content from the peas, as we consider this one of the very best yet. On general hints, we would advocate fumigating for destruction of white fly to be done several times at intervals, for this method does not seem to destroy the eggs, which hatch out if left, and need then to be again attacked.

Other than the few points noted, we are full of congratulations on the timely appearance of a really useful little handbook.

EDWIN BECKETT.

## CATALOGUES RECEIVED.

Messrs. Cartwright and Goodwin, Limited, Churchill, Kidderminster, Worcestershire. An excellent list of choice daffodils, reasonable in price. We take this opportunity of bringing to the notice of readers the change of address of Messrs. Cartwright.

Mr. J. Lionel Richardson, Prospect Gardens, Waterford, Ireland. A list of choice daffodils.

Mr. H. J. Jones, Ryecroft Nurseries, Lewisham, S.E.13.—List of Dahlias, Hydrangeas, Chrysanthemums, Michaelmas Daisies, Phlox, etc. A catalogue which is unpretentious, but contains an excellent list of first-class varieties.

Messrs. Feildan and Crouch, The Fairseat Nurseries, Wrotham, Kent.—An extensive list of Rock, Border and Herbaceous Plants.

## TRADE NOTES.

A new wire has just been placed on the market which should come as a boon to all gardeners who are visited throughout the season by birds. It is well known how much harm and damage is caused in the seed beds by their frequent visits and the gardener has to try all kinds of ruses to frighten them off. This wire, supplied by Messrs. Kent Bros., Electric Wire Co., Berners Street, W.1, is intended to supersede black cotton thread which is so largely employed for protecting plants and seedlings at present. It is certainly a decided improvement, as it is weather resisting, practically invisible and has the additional advantage of being of great durability. When put to the test it has given every satisfaction, so that we are pleased to bring it to the notice of our readers. Various thicknesses can be supplied on convenient reels, which give a range of from 655 to 10,000 yards

to 1lb. At this time of year, when the protection of seed beds and young plants has to be undertaken, we should recommend at least a trial of this novel method of protection.

**Birkbeck College (University of London)**, Breams Buildings, Fetter Lane, London, E.C.4.—A public lecture on "Personal Reminiscences of Botany in the Victorian Age—and After," by Professor F. O. Bower, Sc.D., LL.D., F.R.S., President of the Royal Society of Edinburgh, will be given on Friday, May 22nd, 1925, at 8 p.m. Chair will be taken by Professor Dame Helen Gwynne-Vaughan, D.B.E., D.Sc., LL.D., F.L.S.

**Rhododendron Tyermannii**.—An unfortunate error in the naming of a rhododendron occurred at the recent meeting of the Royal Horticultural Society on May 5th and 6th. The hybrid *R. Tyermannii* (*R. Nuttallii* × *formosum*) was staged by Messrs. R. Gill and Sons of Falmouth as *R. Tyermannii* and given an award of merit by the Floral Committee. *R. Tyermannii* is an old species introduced from Sumatra by Messrs. James Veitch and Sons in the early 'eighties of the last century. It had already received the higher award of a first-class certificate at the R.H.S. Show on March 24th, 1885. This East Indian rhododendron has buff or tawny yellow flowers, belongs to the Javanico-Malayanum section, and was freely used by Messrs. Veitch in the breeding of this well known race of hybrids. The flowers exhibited by Messrs. Gill were large campanulate blooms which have pink markings in the buds, opening to pure white, with yellow staining in the tube. *R. Tyermannii* is named in compliment to Mr. J. S. Tyerman, a former Curator of Liverpool Botanic Garden. Mr. Tyerman retired in 1871 and went to live at Penlee, Cornwall, where, records indicate, he interested himself in the cultivation of plants on the borderland of hardiness which thrive so well in that part of the country.

## Beautiful Garden Books

## SECRETS OF MANY GARDENS

By Mrs. PHILIP MARTINEAU

17 full page illustrations. 12s. 6d. net

## THE HERBACEOUS GARDEN

By Mrs. PHILIP MARTINEAU

Fourth Enlarged Edition. 32 plates. 12s. 6d. net

## ROCK GARDENS

By LEWIS MEREDITH

Third Edition. Many illustrations. 10s. 6d. net

## THE MAKING OF A GARDEN

By D. H. MOUTRAY READ

Profusely illustrated. Cheap Edition. 7s. 6d. net

## TREE WOUNDS AND DISEASES: THEIR PREVENTION AND TREATMENT

By A. D. WEBSTER

Profusely illustrated. 7s. 6d. net

## EVOLUTION of PLANTS

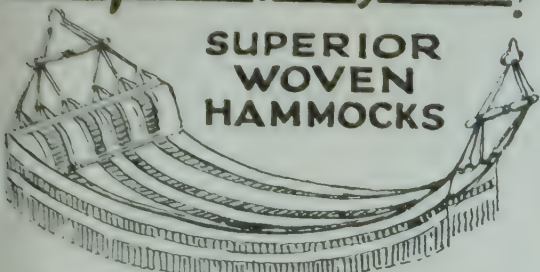
By Dr. D. H. SCOTT

Fully illustrated. 2s. 6d. net

FOR FULL GARDEN CATALOGUE WRITE TO:  
**WILLIAMS & NORGATE, LTD.**  
14, HENRIETTA STREET, LONDON, W.C.2



# Comfort in the Garden!

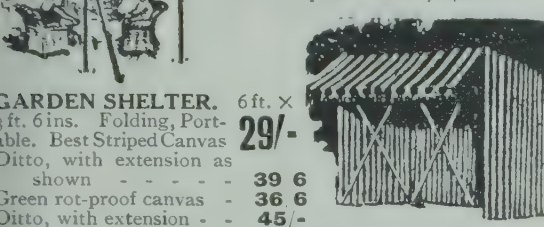


## SUPERIOR WOVEN HAMMOCKS

IN ATTRACTIVE STRIPED COLOURINGS. FULL SIZE. ENGLISH MANUFACTURE.

- No. 1.—With Pillow, but no Valance - - - - 17/6
- No. 2.—With Pillow and Valance - - - - 21/-
- No. 3.—More open texture. Without Pillow and Valance. Plain Colours: Orange, Green, Scarlet 9/6

**SUN AWNING.** Superior Striped Canvas, complete with wall bracket, etc., as illustrated.  
 6 ft. deep X 6 ft. long - - 23/6  
 6 ft. deep X 9 ft. long - - 31/6  
 6 ft. deep X 12 ft. long - - 41/6  
 Green rot-proof canvas, 2/6 extra.



**GARDEN SHELTER.** 6 ft. X 6 ft. 6 ins. Folding, Portable. Best Striped Canvas 29/-  
 Ditto, with extension as shown - - - - 39 6  
 Green rot-proof canvas - - - - 36 6  
 Ditto, with extension - - - - 45/-

**MAHARAJAH FOLDING CHAIR.** Compact and Comfortable.  
 Striped Canvas - - - - 12/6  
 Green Rot-proof ditto. - - 14/-  
 Heavy Jazz Stripes - - - 15/-

**PINOLEUM SUN BLINDS.** Suitable for Inside and Outside. Shade yet Ventilation. Complete with top rail and fitted with catch to hold blind in any position. Painted Green. Any size made to order. Stocked as follows:—

Width	Length	Price	Width	Length	Price
36"	72"	7/9	48"	84"	13/6
42"	84"	10/-	54"	96"	15/6
46"	84"	12/3	60"	96"	18/6

All above are Carriage Paid, England and Wales.

**SMITH & ELLIS, Ltd. (Dept. 13),**  
 11, Little Britain, Aldersgate Street, London, E.C.1.

Please mention THE GARDEN when writing.

**POTATOES: HOW TO GET THE BEST**  
 OPS. A booklet that is full of useful information. By WIN BECKETT, V.M.H., 9d. net, by post 11d. Published by the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

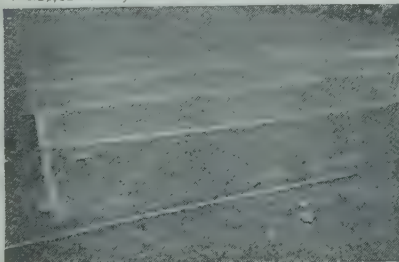
**CHELSEA SHOW, STAND No. 19,**  
 IN THE AVENUE.

Fig 10

## "EVERYMAN'S"

PATENT  
**NETTING SUPPORTS**  
 For Protecting SEEDS & STRAWBERRIES from BIRDS.  
 PERFECTLY SIMPLE.  
 SIMPLY PERFECT.

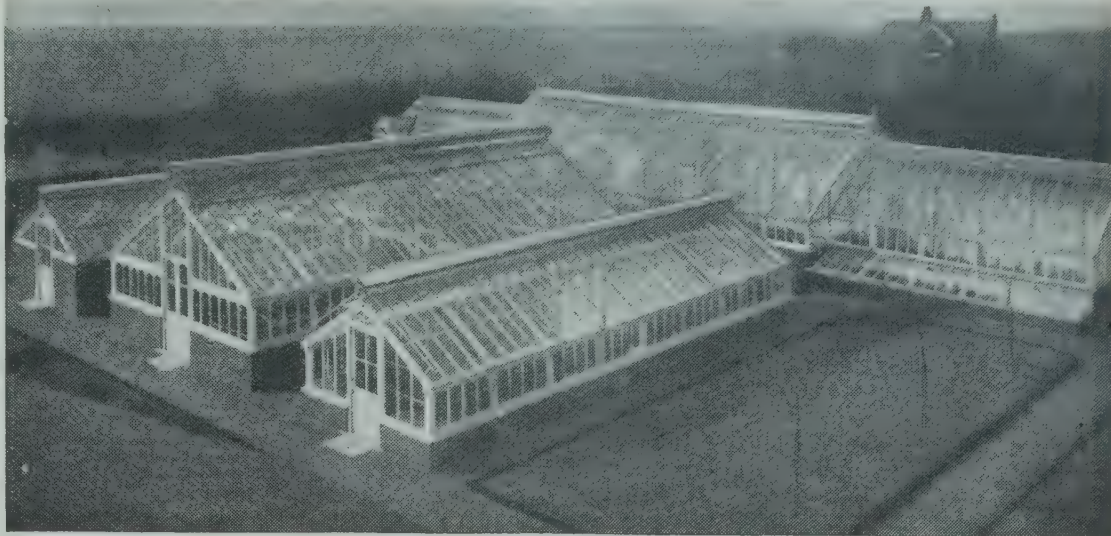
Price (as illustration) 8/- per dozen.  
 Larger size, 20 ins. above ground, 12/-



Also "EVERYMAN'S" Patent SEED-SOWER, WALL BRACKETS, WALL-CLIPS and PATENT STRAINING-WIRE.

for rapid and easy securing of Raspberry Canes, Loganberries, Etc.  
 from LEADING DEALERS, STORES, ETC. If out of Stock write:— Dept. G.C.,  
**HOUSE & GARDEN SUNDRIES Co., Ltd.,**  
 10, EASTCHEAP, LONDON, E.C.3.

Please mention THE GARDEN when writing.



## MODERN GLASSHOUSES

THE illustration above shows range of Glasshouses erected by Boulton and Paul, Limited.

An extensive range of stock designs is always available to choose from, complete with Heating Apparatus; also Potting and Boiler House, with every modern accessory.

We are able to offer you the service of an expert staff of designers, and are only too willing to advise you on any subject. Should you so desire we will send our representative to consult with you and prepare schemes for any kind of horticultural work.

Illustrated Catalogue will be gladly sent on request to Dept. AW/G.

Enquiries invited for Conservatories, Glasshouses, Peach Houses, Vineries, Carnation Houses, and Horticultural work of every kind. Garden Frames in every variety. Ask for Leaflet AG.

## Boulton & Paul Ltd

Telegrams **BOUTLON NORWICH** Telephone **NORWICH 851 (5 lines)**

LONDON OFFICE 135-137 QUEEN VICTORIA ST. E.C.

Telegrams: Boutique Cent London Telephone 4642 Cent



### No. H 49a. SPAN-ROOF GREENHOUSE

This Span-Roof House, made in sections for easy erection, is ideal where only a limited space is available. In six sections, with bolts for easy re-erection. Painted one coat. Glass cut to size and packed in boxes ... **£18:10:0**

If glazed at works and painted two coats, packed in close cases to prevent damage ... **£22:7:0**

Carr. paid to most stations in England and Wales. Prices for heating and stages sent on application.

Write for free copy of our booklet, which tells you all about this Greenhouse. Mention G 169.

## WEEDS

### HARRISON'S Reliable WEED KILLER

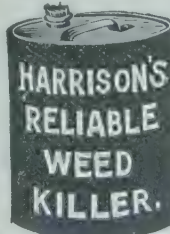
will keep your Garden Paths, Carriage Drives, etc., free from weeds for at least 12 months. The best Killer for Daisies, Plantain and Dandelion in Lawns. Brightens the Gravel. Immense Saving in Labour.

5 Gallons .. 23/6 Drum .. 12/- extra, Carr. Paid  
 10 " .. 42/6 " .. 15/- " " "  
 40 " .. 150/- Cask .. 80/- " " "

Irish orders are not subject to these carriage terms but are paid to any English port. Full price allowed for all drums and casks if returned in good condition carriage paid within 2 months.

N.B.—In the prices of the above please note that this Weed Killer mixes 1 to 50 of water, being double the ordinary strength. One gallon mixed with 50 gallons of water will cover an area of from 150 to 200 square yards effectively.

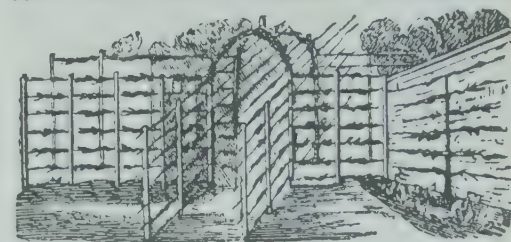
**G. HARRISON,**  
 Horticultural Chemist,  
**READING**



Please mention THE GARDEN when writing.

## HILL & SMITH, Ltd., BRIERLEY HILL, STAFFS,

Makers of  
**IRON FENCING, HURDLES, GATES, WIRE NETTING AND GARDEN IRONWORK**



Other Products—Hay and Grain Sheds, Dutch Barns, Galvanized Corrugated Sheets and Structural Steelwork.

Catalogues free on mentioning this paper.  
 London: 8, VICTORIA ST., WESTMINSTER, S.W.1

Please mention THE GARDEN when writing.



# NICOTINE INSECTICIDES

are by far the most efficient and economical for destroying all sucking insects infesting vegetation

**ENGLISH NICOTINE—95-98 per cent.**

Full directions for using as fumigant or spray fluid.

Prices on application.

**NICOTINE VAPORISING COMPOUND.**

Nicotine content 50 per cent. In bottles for 2, 8, 16, 20, and 40 thousand cubic feet.

Prices: 1/6, 3/9, 7/6, 9/- and 17/6 respectively; 1/2-gallon tins, 61/-

**CAMPBELL'S PATENT SULPHUR VAPORISER.**

For vaporising sulphur. The best method of exterminating Mildew in glasshouses. Apparatus lasts for years. 5,000 cubic feet size, 18/-; 10,000 cubic feet size, 20/- each.

Obtainable through your usual Chemist or Seedsman or, in case of difficulty, write the Manufacturer,

**J. D. CAMPBELL, Nicotine Manufacturer, 5, Lund St., Cornbrook, Manchester.**

**NICO SOAP (Nicotine Soap).**

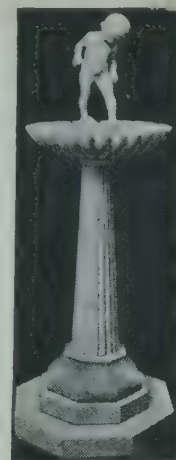
The best potash soft soap plus 7 1/2 per cent. nicotine, for spraying or syringing work.

Prices: 1/2-lb., 2/-; 1-lb., 3/6; 10-lbs., 30/-

**CAMPBELL'S FUMIGATING ROLLS.**

Very simple, for fumigating greenhouses. In four sizes for 500, 1,000, 2,000 and 3,000 cubic feet.

Prices: 7d., 10d., 1/6 and 2/- each.



TO Beautify the Garden

This charming new design

Fluted  
**BIRDS' BATH  
& PEDESTAL**

2ft. diameter.

Special Price

£5 5 0

"Boy with Frog" figure, 3/6

Illustrated Booklet "Ideal Garden Ornaments," post free.

**SANDERS & CO., Sundial House**

**365, Euston Rd., London, N.W.1**

Please mention THE GARDEN when writing.

## SMITH'S "PERFECT" WEED KILLER

POWDER

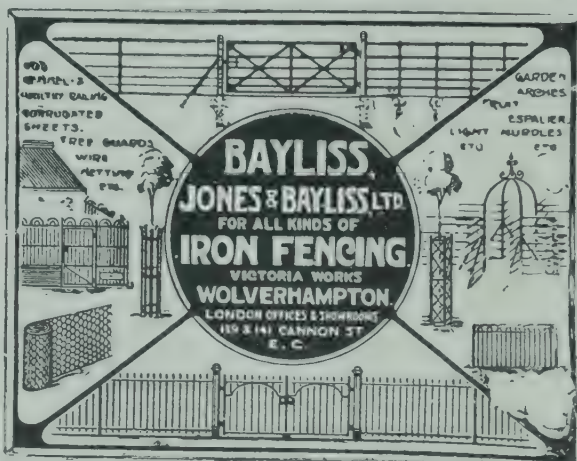
POWDER

Also in Liquid—4 Gallons Carriage Paid.  
First Weed Killer ever offered and first ever since.  
SMITH'S "PERFECT" NON-POISONOUS WEED KILLER—LIQUID.

Best Value. Most Reliable. Full Satisfaction  
Guaranteed. Prices and Particulars of—

**MARK SMITH, LTD., LOUTH, LINCOLNSHIRE**

Please mention THE GARDEN when writing.



## Just Published. THE GARDENER

A Book of Brief Directions for the Growing of the Common Fruits, Vegetables and Flowers in the Garden and about the House. By

**L. H. BAILEY**

With Illustrations. **8s. 6d. net.**  
**MACMILLAN & CO., LTD., LONDON**

Please mention THE GARDEN when writing.

THE NEW COMPLETE LIST

of

## GARDEN BOOKS

published by "Country Life"

is

**NOW READY**

FREE ON APPLICATION TO THE PUBLISHERS,  
20, TAVISTOCK ST., COVENT GARDEN, W.C.2



By Appointment



State quantity of each size required, and have Carriage Paid quotation, or write for illustrated Price List

**RICHARD SANKEY & SON, LTD.,**

Royal Potteries.

**BULWELL, NOTTINGHAM.**

Largest Manufacturers of  
Flower Pots in the World.

THE BEST AND  
CHEAPEST.

SPECIAL POTS  
for Roses, Vines,  
Clematis, Orchids, and  
Chrysanthemums.

Fancy Fern Pans and  
Bulb Bowls,  
from 4d. each.

No Waiting  
All Orders executed  
the same day as  
received.

**SWEET PEAS  
AND OTHER  
CLIMBING PLANTS**

LOOK BETTER,  
GROW BETTER  
WITH  
LESS TROUBLE

WHEN GROWN ON  
"SIMPLICITAS" PATENT  
ROT-PROOF CORD  
NETTING.

DOES NOT INJURE  
BLOOD NOR FOLIAGE.  
LASTS FULLY FIVE YEARS.  
WRITE FOR PARTICULARS TO  
**GARDEN SUPPLIES LTD Cranmer St. LIVERPOOL**

Please mention THE GARDEN when writing.

## NETTINGS.

**GARDEN NETS**—for Fruit Protection. Any lengths and widths. Corded all round.

New 1in. square mesh, heavy	6 1/2d. per sq. yd.
New 1in. " " medium	5 1/2d. " "
New 1 1/2in. " " light	5 1/2d. " "
New 2in. " " medium	7 1/2d. " "
Repaired 1in. " "	3 1/2d. " "
Repaired (not corded) 1in. diamond mesh,	9/- per 1 square yards.

**NEW TENNIS BOUNDARY NETS.**

Any lengths and widths, corded all round, 7d. per sq. yd.

**NEW TENNIS NETS.**

Various qualities, from 16/- to 31/- each.

NETS for all purposes. Samples and full particulars from the manufacturers—

**JOSEPH BENTLEY, Ltd.,  
Barrow-on-Humber, HULL**

(Sole proprietors of B. EDDY & SONS).

Please mention THE GARDEN when writing.

## THE FLORAIRE NURSERIES

(H. CORREVEON, PROPR.)

Chene-Bourg, near GENEVA (Switzerland).

The OLDEST FIRM for ALPINE PLANTS.

## ALPINE PLANTS

Grown from seed and acclimatised for English Gardens.

## SEEDS

Of all Alpines, Shrubs and Perennials, for Rock Garden, Herbaceous Border, &c.

The most complete collection including many rarities not to be had elsewhere.

APPLY FOR CATALOGUE.



# THE GARDEN.

**WATERER'S GOLD MEDAL RHODODENDRONS** and Azaleas, Rare Hardy Shrubs, Alpine and Perennial Plants, Vegetable and Flower Seeds, Outdoor Chrysanthemums, Climbing Plants and Dahlias. Catalogues Free.—**JOHN WATERER, LTD.** AND **CRISP, LIMITED**, Twyford (Berks.), Bagshot (Surrey), London.

**HAKELEY'S PATENTED HOP MANURE.** The original and only substitute for Stable Manure. See advert. on back cover.

**M. DUNCAN TUCKER & SONS, LTD.,** 100, Victoria Road, South Tottenham, N.15.—Conservatories, Water Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**BIRDS' BATHS, GARDEN VASES, SUN-GLASSES, NESTING BOXES.** Catalogue (No. 4) free.—**BORTON**, 60, Buckingham Palace Road, S.W.

**TANNED GARDEN NETTING**, small mesh, 25yds. by 1yd., 2s.; 25yds. by 2yds., 4s.; 40yds. by 1yd., 3d.; 40yds. by 2yds., 6s. 6d.; 40yds. by 3yds., 9s. 9d. Large paid. Compare our netting with others. Lists now ready.—**GALLOP**, Net Manufacturer, Hastings. Telephone: 352.

**WELLS' CATALOGUE OF CHRYSANTHEMUMS** now ready, and will be sent post free on application.—**WELLS & CO.**, Mersham, Surrey.

**M. ARTINDALE & SON**, Nether Green, Rotherham, Sheffield, will be pleased to send their Catalogues of Hardy Plants, Seeds and Gladioli on request.

**TENNIS BOUNDARY NETTING**, 50 yds. x 25yds., 20/-; Iron Standards, 9 ft., 3/- each. Tennis Nets from 1/-; Sports Lists now ready.—**GALLOP**, Net Manufacturer, Hastings.

**IPSWICH RARE SEEDS.** Catalogue describing nearly 3,000 kinds now ready. Free on application to **DIMPSON & MORGAN**, London Road, Ipswich.

**WALL OF WISE SAWS AND MODERN PLANTS.** Our catalogue offers all that is brightest and best for the present day garden. The choice plant at Sixpence a dozen may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—**FEILDEN AND CROUCH**, 2, Westgate Nurseries, Wrotham, Kent.

**NEW ZEALAND PLANTS** for Seaside Gardens.—*Pittosporum nigrescens* for hedges, pot grown plants for planting, now 18/- per doz. *Olearia Macrodonata*, 12/- doz.; splendid for hedges. *Olearia Haastii*, 1 ft., 1/- per doz. *Brachyglottis repanda*, 2/6 and 3/6 each. *Matitis indivisa*, 2/6 each. *Ozothamnus*, 2/6 each. *Muhlenbergia complexa*, 1/6 each.—**TRESEDER & CO.**, The Nurseries, Rye.

**GARDEN NETS**, tanned, small mesh, for Peas, Beans, and Strawberry protection. 30yds. long, 2yds. wide, 4/6; 30yds. by 3yds., 7/-; 30yds. by 4yds., 9/-; 30yds. by 5yds., 11/6; 30yds. by 6yds., 14/-; Carr. paid.—**ALFRED BINSON**, Garden Net Works, Rye.

**LOOK!" STOUT NETS**, for Tennis Court Covering, lined top and bottom, 30yds. long 2 yds. wide, 16/-; 30yds. by 3yds., 22/-; 30yds. by 4yds., 30/-; Standards for Tennis (wooden) 10ft. high, 3/- each. All carr. paid.—**COUSSENS & CO.**, Tennis Net Works, Rye.

**ANTIANNA SINO-ORNATA**—Charming double blue, blooming Autumn, 10/- per doz.; 6/- for six. **MORRIS**, Formakin, Bishopton, Renfrewshire.

**BICYCLES CHEAPER!!!**—Temporary offer of High Grade Cycles at considerably under list price!! Roughly well made and Guaranteed. Every part British. The perfection at a low price!! Immediate delivery passenger cycles, £4 10s. Write for list 300 other bargains.—**GREEN'S**, Department 85, Lytham.

**BARR'S SEEDS FOR JUNE SOWING**, for Vegetable and Flower Garden, Rock Garden and Greenhouse. Finest selected strains and tested growth. Special List Free.—**BARR AND SONS**, 11, 12 and 13, King Street, Covent Garden, London, W.C.2.

**THE DOUGLAS CLOVES AND BORDER CARNATIONS**; glorious scent, stiff stems, and continuous flowering. The new crop of seed is now ready to sow. 2s. 6d. and 5s. per packet. Plant catalogue now ready.—**J. DOUGLAS** (The Premier House for Carnations), Gt. Bookham.

**IRON AND WIRE FENCING FOR GARDENS**.—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—**BOULTON AND PAUL, LIMITED**, Norwich.

**SEWAGE DISPOSAL FOR COUNTRY HOUSES**.—No emptying of cesspools; a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—**WILLIAM BEATTIE**, 8, Lower Grosvenor Place, Westminster.

**JAMES BACKHOUSE, F.L.S., F.R.H.S.**, for many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to **CAER FEGLA**, Arthog, North Wales.

**LAXTON'S NEW SEED CATALOGUE**, containing Novelties for 1925. New Pea "Bedford Champion" and "Laxton's Progress," post free on application. Fruit Tree Catalogue and Cultural Hints can also be sent, post free, on request.—**LAXTON BROTHERS**, Nurserymen, Bedford.

**CHOICE NEW CHRYSANTHEMUMS**.—Our Catalogue of nearly 900 varieties, including Grand Novelties for 1925 (also Choice Pelargoniums, Dahlias, etc.), is now ready. Post free on application.—**J. W. COLE AND SON**, Chrysanthemum Specialists, Peterborough.

**GARDEN NETS**.—Best tanned, small mesh, 25yds. by 1yd., 2/-; 25yds. by 2yds., 4/-; 25yds. by 3yds., 6/-; 25yds. by 4yds., 8/-; Carr. Paid. Satisfaction guaranteed. Tennis nets from 10/-. Special nets for tennis boundary. Pea training nets. Lists and samples free.—**G. JARRETT**, Net-maker, Rye.

**VANCOUVER ISLAND** and Pacific Coast rare ornamental alpine and lowland plants, bulbs, etc. Only those difficult or impossible to obtain in England are offered. Plants well packed and despatched at the right time of year arrive in good condition. Write for list.—**J. BENNETT**, Lake Hill P.O., Victoria, B.C., Canada.

**CRAZY PAVING**.—Dwarf Walling, Rockery Stone direct from quarries. Cheapest and most artistic on market.—**CLAYTON AND HAMMOND, LIMITED**, 53, Baker Street, W.1.

**SUNDIALS, BIRD BATHS, VASES**.—In Imperishable Reconstructed Stone. Write for catalogue G2.—**CLAYTON AND HAMMOND, LIMITED**, 53, Baker Street, W.1.

**LOOK! TANNED GARDEN NETS**.—All orders despatched same day. 25 yards by 1 yard, 2/-; 25 by 2, 4/-; 25 by 3, 6/-; Odd netting for bushes, 6 lbs. for 2/6. All carriage paid. Any sizes supplied. Also Tennis Boundary Nets.—**MOORE & CO.**, Net Works, Rye.

**LOAM**.—Fibrous Yellow Turf Loam. Illustrated Catalogue Free.—**A. B. JOHNSTON**, New Park, Cranleigh, Surrey.

**FOR 7/-** will send post free 4 doz. *Schizostylis coccinea*, 6 *Libertia bicolor*.—**HANBURY**, Inverewe, Poolewe.

## SUTTON'S WALLFLOWERS.

The cultivation of the Wallflower was revolutionised when we introduced the wonderful Orange-Scarlet varieties, and we strongly recommend flower lovers to try the following:—**SUTTON'S FIRE KING** (orange-scarlet). **SUTTON'S ORANGE BEDDER** (vivid orange). **SUTTON'S CLOTH OF GOLD**. **SUTTON'S GIANT VULCAN** (a fine crimson variety). Each Per Packet, 2/6 and 1/6. **SUTTON AND SONS**, THE KING'S SEEDSMEN, READING.

**DOBBIE'S PLANT CATALOGUE** now ready. Free to all readers. Please mention THE GARDEN when writing.—**DOBBIE & CO., LTD.**, Edinburgh.

**CHEAP GOVERNMENT WIRE!!!** Great for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—**GREEN'S GOVERNMENT STORES**, 69, Albert Street, Lytham.

**HERRING NETS** for protecting seeds, fruit, etc., approximately 100ft. by 30ft., 11/6 each. Other nets, better quality, 21/- each. Carriage paid. Cash with order.—**WM. G. GRIGOR**, Earl Street, Port Gordon, Banffshire.

**MICHAELMAS DAISIES**.—Pyrethrums and other hardy perennials. For new catalogue write to **MRS. THORNELEY**, Nursteed, Devizes.

**GARDEN NETTING**.—Best selected, small mesh, tanned, 25 by 4 yds., 8/-, or 8 yds., 16/-. Carriage paid. Tennis Nets and Standards. List free.—**STRAWBERRY NETTING CO.**, 5, Suffolk Terrace, Lowestoft.

**WALL AND WATER GARDENS**. With chapters on rock gardens, heath gardens, and paved water gardens. By **GERTRUDE JEKYLL**. 7th edition, revised. 17s. 6d. net; by post, 18s. 4d.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**THE CULTURE OF CHRYSANTHEMUMS**. By **W. WELLS**, 2/6 net; cloth, 3/6 net; by post 6d. extra.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**GARDEN DESIGN** is best dealt with in "Planning and Planting of Little Gardens," by **G. DILLISTONE**, 6/-; by post, 6/6. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**WOULD** anyone having spare copies of "Farrer's Works" please send particulars and prices to **J. W. CLAYTON**, Bryn Derw, Plan Conway.

**PRIMULA, ALPINE AND PERENNIAL**, Seeds, from large (1,500) collection, sold cheap. List free.—**REV. J. F. ANDERSON**, Glenn Hall, Leicester.

**SCOTCH CABBAGE PLANTS**.—BEST PLANTS, LOWEST PRICES. Price List of autumn sown of all varieties (excepting Brussels Sprouts, Curled Greens and Reds, which are sold out), grown from our famed select stocks, for prompt delivery, carriage paid to any district in Britain, on application.—**JOHN GILLIES, PRESTONPANS, LIMITED**, Prestonpans, East Lothian, largest cabbage plant growers in Britain. Established over 50 years. Telegrams "Plants, Prestonpans." Telephone 24 Prestonpans.

**HOW TO HEAT YOUR HOUSE**.—By **Edwin Gunn, A.R.I.B.A.** Better Lighting—Cheaper Fires—Hotter Baths—Healthier Air. Just Published, 2/6 net.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**GREENHOUSE PAINTING AND GLAZING**.—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7lb. tins., 4/- post free; 14lb. tins., 5/6, each, carriage extra, tins free.—Full particulars from **W. CARSON & SONS**, Grove Works, Battersea, S.W.11.



# A Word to Present and Future Users of the **ATCO** MOTOR MOWER



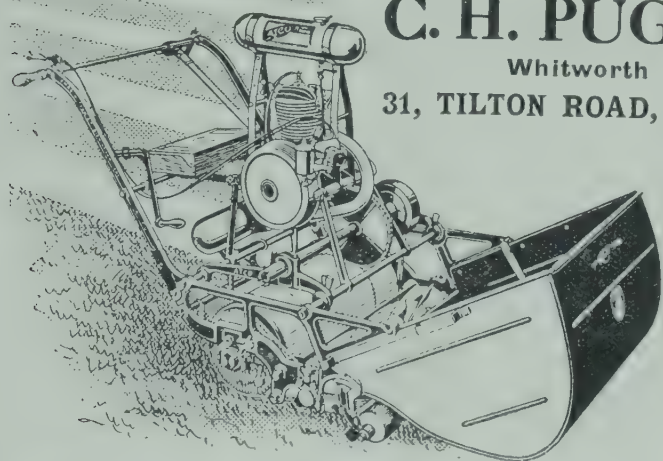
Owing to a remarkable increase in the Sales—and popularity—of the ATCO Motor Mower we are enlarging many of our Depots—increasing our equipment and extending our activities. Our Organisation, always planned to be of the greatest possible use to owners and prospective owners of ATCO Motor Mowers, now comprises—

**10 permanent Depots** completely equipped and permanently staffed—a chain extending over the country—**London; Birmingham; Cambridge; Darlington; Newport (Mon.); Exeter; Ormskirk, Lancs.; Reading; Glasgow and Sheffield.**  
**32 Sub-Depots; 55 Representatives; 32 Mechanic-Representatives.**

These are ready to assist any of the 8,000 ATCO owners to get the best out of their machines—and any of the Depots can arrange a free demonstration with the ATCO Motor Mower on your own grass. If you are interested in efficient turf culture send for our free publications on the subject.

## C. H. PUGH, LTD.

Whitworth Works,  
31, TILTON ROAD, BIRMINGHAM



Large numbers of  
ATCO Motor  
Mowers have  
been supplied to  
Royalty, the  
Nobility, Coun-  
try Gentry, Clubs  
and Corporations

*Nores from Maidstone.*

—  
FOR  
PRESENT PLANTING

### ALPINE PLANTS

*in little pots are now in good condition for planting:*  
**AUBRIETIAS, ROCK ROSES, SAXIFRAGE, SEDUM, ETC., ETC.**

### BEDDING PLANTS.

*The weather is still very cold, but it will soon be safe to plant*  
**ANTIRRHINUMS, DAHLIAS, FUCHSIAS, GERANIUMS, CHRY-SANTHEMUMS, ETC., ETC.**

### CLEMATIS

*and other Climbers in pots are ready for sending out.*

—  
WRITE FOR OUR NEW LIST.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.

*Please mention THE GARDEN when writing.*

## New Dwarf Single Bedding Dahlia "COLTNESS GEM"

(Brilliant Scarlet.)

The original Stock introduced by me in 1918. Height 18 inches; no stakes required. Makes a striking bed and flowers all season until cut down by frost. The ideal plant for public parks and open spaces, also for large and small gardens.

Award of Merit, R.H.S. Dahlia Trials, 1923.

Price 10/- per dozen, post free.

## Dwarf Bedding Dahlia, Dunecht Yellow

(NEW), Seedling from "COLTNESS GEM," same height and habit.

Price 12/- per dozen, packed and post free.

**D. G. PURDIE, 6J, Waterloo St., Glasgow**

*Please mention THE GARDEN when writing.*



Approximate length in yds. per reel.	Price per reel.
230 .. .. .	1/1
270 .. .. .	1/2
*320 (thickness of stout thread)	1/3

CASH WITH ORDER.

## DON'T BE TROUBLED BY BIRDS!

— USE —

## KENT'S WIRE THREAD.

**A NEW AND EFFECTIVE DEVICE** for protecting seedlings, plants, and lawn seeds from **BIRDS**. Its tenacity and vibrating character unique for scaring purposes. It is covered with black weather-resisting composition. It is durable, inexpensive, and neat. It is supplied on reels and easy to handle.

Enquiries invited.

Special Terms to the TRADE.

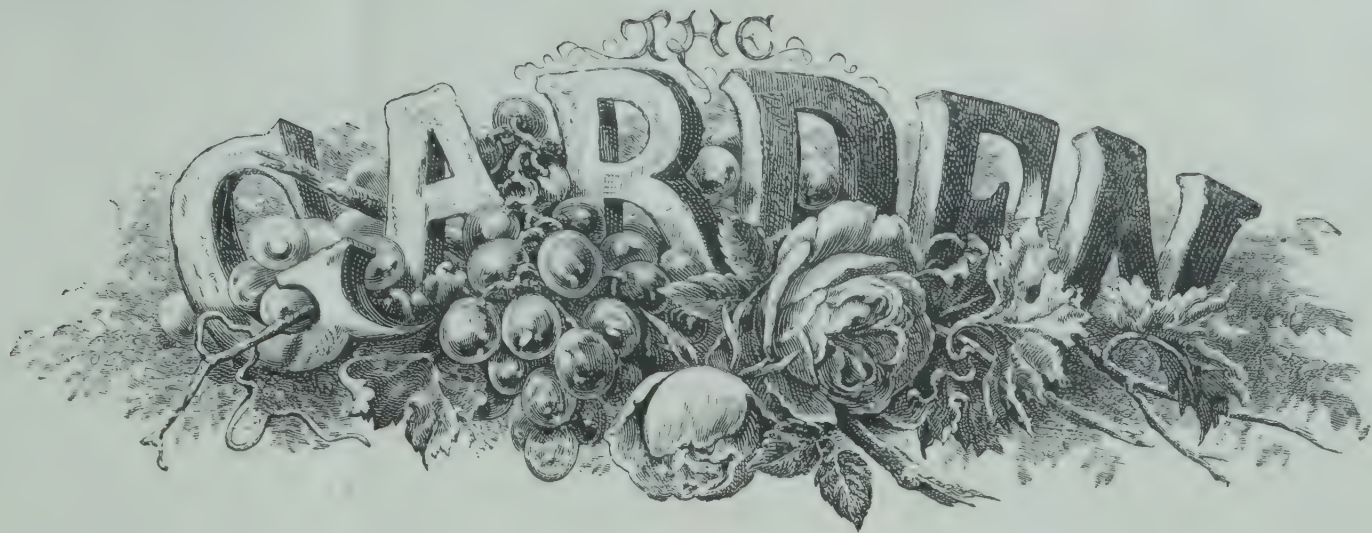
Approximate length in yds. per reel.	Price per reel.	Approximate length in yds. per reel.	Price per reel.	Approximate length in yds. per reel.	Price per reel.
420 .. .. .	1/4	750 (thickness of medium thread)	1/9		
510 .. .. .	1/5	*Recommended for experimental purposes.			
700 .. .. .	1/8	Prices include reels and postage.			

Supplied in thicker and finer sizes if required.



**KENT BROTHERS ELECTRIC WIRE CO. & E. H. PHILLIPS, LTD.,**  
15, Berners Street, Oxford Street, W.1. Horticultural Dept.: 43, Berners Mews, W.1. Telephone: Museum 8200.





VOL. LXXXIX.—No. 2793.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
Entered as Second-class Matter at the New York, N.Y., Post Office.

MAY 30, 1925

## GARDENERS: I—THE COMMUTER

LIVING as I do in London, I count among my friends many who live in the country and work in town. We have no name for this method of life, so I have to borrow an American expression: he who commutes, the commuter. Although he could be called a week-end gardener during the winter months, for he never sees his garden except on Saturday and Sunday, yet the true week-end gardener conjures up the vision of gardening on ground which is not home, but a plaything to be visited on a fine Saturday to Monday in summer. Ergo, the real week-ender, can only play at gardening, whereas, if a commuter takes up gardening seriously, it usually ends in becoming one of the most important things in his life.

There is no gardener so serious as the real commuter gardener, and perhaps this is strange, for he is comparatively a new comer, brought into existence by such modern conveniences as the motor and the electrification of suburban railways, but he has certainly come to stay and will take a greater part each year in our gardening life.

There is an expression that there is no fool like an old fool. Perhaps the metaphor is a little unkind, but there is certainly no gardener so keen as he who takes up horticulture late in life. Presumably he is a busy man and in order to make a living has to train his brain in his occupation, and so, having to fight his own battles in a city, is able to attack the science of horticulture from the right angle, for to be able to weigh the pros and cons is just as great an asset in gardening as in anything else. The commuter gardener may often stumble, he certainly makes mistakes, he frequently scorns the obvious, he sometimes defies old established rules and customs, but some way or other he gets there in the end and accomplishes what he has set out to do.

You can see them at any of the big flower shows, very much the city man, bowler hat, starched collar, short black coat, dark trousers, black boots and all, and you wonder what this incongruous figure is doing. You may watch him and you suddenly discover that he is there with a purpose, that he is not merely there to pass the time of day with his friends and admire the exhibits. He knows what he wants and he has a nose like a truffle-hound for finding good varieties or new species or odds and ends which are not easily found.

This may sound a most unromantic form of gardening, but it is not. The only thing is that romance varies according to conditions. The commuter gardener levels all his affections of the countryside on getting results and he says quite frankly that it is his garden that interests him and not the general panorama. Consequently he often knows more of the lore of his particular branch of gardening than the man who spends his

life in the country and whose country pursuits are much wider in their application. The commuter gardener often studies the literature of his subject in the evening; he is always a voracious catalogue reader, while the man who lives in the depth of the country rushes to his wireless or to the latest novel. This crisscrossing of ones aspirations is only natural; it is the desire to escape from the rut.

I have a great admiration for the commuter gardener. Invariably he makes up in keenness what he may lack in knowledge or even in judgment. It is obvious that this is so, for there is no necessity for him to garden; if there are not already six tennis courts and a golf course or two in the neighbourhood, there soon will be. One commuter of my acquaintance with a passion for rock gardening started, I confess partly on my advice, growing various species of primulas. He has become keener and keener on the genus and has combed the British Isles and the Continent for treasures. In the space of one short year he has amassed a wonderful assortment. Not content with collecting the plants, an occupation which I am sure has given him a great deal of fun, he has also followed the trail of finding out all he can about them. Everyone knows that as a genus the primula is difficult to grow successfully. Many gardeners would take a good deal for granted with consequent failures. Not so my friend; he takes nothing for granted and no doubt will be extremely successful.

This case is not by any means an exception, for as a rule the commuter gardener is a vigorous individual who knows his own mind and sees that he gets what he wants. I am shown over many gardens in the course of a year and I must confess that almost without exception the best of the smaller type of garden that I see belong to people who journey daily to a town, not necessarily London, to work. There may be something in the old proverb that familiarity breeds contempt, for there certainly seems to me to be a vigour and a freshness in outlook and result when a business man takes up gardening, which is occasionally lacking in gardens where the owner is at hand every day in the year.

E. H. M. C.

### AMONG OTHER ARTICLES IN OUR NEXT ISSUE WILL BE:

SUMMER BEDDING, by Arthur J. Cobb.

HYDRANGEAS, by I. Hawker.

GARDENS OF HEALING, by Victoria Slade.



# PLANTS FOR THE WOODLAND

BY DR. R. LLOYD PRAEGER.

**L**OOKED at from the gardening point of view—the natural point of view for this journal—the subject of woodland plants resolves itself into the question: What species can we plant under trees with a fair chance of their succeeding? The list is a good deal longer than might at first be supposed, I think for the following reason. In places where summer really *is* summer—in Galicia, Lombardy or Carinthia, Maryland or Manitoba—many plants live in the woods to escape the heat and glare of July and August. But our comparatively cool and watery summer sunlight (cold and wet best describes the sunlight of the past two “summers”) is something of which these shade plants are not afraid, and in consequence we are inclined to class as border plants many which are actually fitted to a woodland existence. Woodland plants flourish in partnership with trees by means of various devices, for they live under peculiar conditions. Firstly, there is a great diminution of light. Even in a leafless wood the amount of light which reaches the ground is only about a quarter of that which falls on the tree-tops; when the trees are in leaf the amount

in which food is retained through the dry season and is held ready for an early start in the following spring. The rich humus soil in which woodland plants live no doubt renders the problem of existence easier, and it has in some cases resulted in the total abandonment of the chlorophyll habit which is characteristic of the whole vegetable world with the exception of the fungi.

But it does not follow from what has been said that we may assume that a spring-flowering species or a bulb-bearing species is therefore a woodland plant. Nature employs these devices in other cases besides. Bulbs, for instance, are abundant on the African veldt, where their use, indeed, is to store up food through the burning summer, but where a high light intensity prevails during the plant's growing period, to which it has become accustomed, and without which it would pine. But where, among hardy plants, we find thickened underground parts, or early flowering, or large, thin leaves, or a partiality for leaf-mould, we may suspect that many of them will not object to woodland conditions. And by this last phrase

one implies much more than attempts at planting in actual woodland. Wherever sunlight is cut off for the greater part of the day these observations apply. It may be the north side of a house or a wall or a fence or the shade of a single tree. Anywhere where ferns will flourish, and in some shaded places too dry for ferns, the woodland flora will supply some species to come to the gardener's assistance.

But it is time we came on to the plants themselves. Let us take the more obvious spring-flowering herbs first, as exemplified by the celandines and primroses and anemones of our own woods, and consider them in relation to woodland planting. The hepatica (*Anemone Hepatica* and *Hepatica triloba*) is characteristic of northern and alpine European woods, and one cannot have too much of it and its allies—white, red and blue, single and double. The hellebores furnish a charming set of winter-flowering shade plants,  $\frac{1}{2}$  ft. to 3 ft. high, with flowers of green or white or purple. The hellebores are so well known that it hardly appears necessary to give a selection of the many species. All are fond of a rich soil, and are very slow and deliberate in settling down to business. Like the foregoing, *epimedium* is a very early-flowering genus with delightful foliage

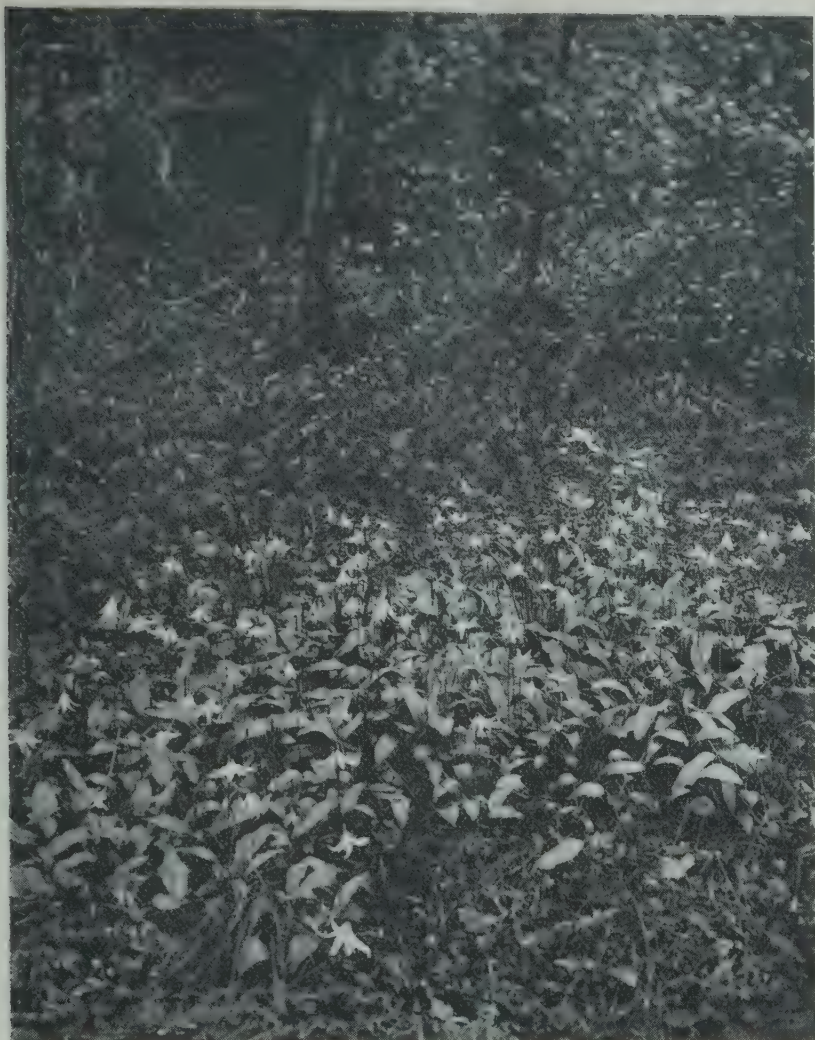


THE HELLEBORES FORM A CHARMING SET OF WOODLAND PLANTS.

of illumination is much less still, depending on the kind of tree. While in a wood of birch or oak sufficient light gets through to allow of a varied ground flora, a forest of beech or spruce may so reduce the illumination that no ordinary plant can live, and the only inhabitants (among the higher plants) are a few parasites or saprophytes which, like toadstools, are not dependent for their food supply on the action of sunlight upon chlorophyll. Then, again, plants growing in woods must guard against drought, both because the trees use up a vast amount of the water of the soil and because the leaves intercept much of the rainfall, and it evaporates without reaching the ground. The scarcity of light and water in summer, then, is the main difficulty that woodland plants have to face. While they meet it in many different ways, two methods stand out conspicuously. In the first place, they speed up when the year begins, and get through their “summer course” early; they do their growing and often their flowering before the trees come into leaf. In this way they get plenty of light and moisture during their active period, and their blossoms are more open to insect visitors, or to the wind in the case of wind-pollinated flowers. Secondly, they very often have swollen underground parts—bulbs or tuberous roots or stems—

and graceful sprays of red, yellow or white blossoms. Its cousin *Vancouveria* is charming likewise, spreading rapidly and flowering later. The type is deciduous, but var. *sibirica* is evergreen. The lungworts, *pulmonaria*, are pleasing both from their quaint leaves, often mottled with white, and their flowers, which in most species open red and turn blue, like many other members of the forget-me-not family. There are a number of species, some blooming as early as January. *Omphalodes verna*, a cousin of the last, is an old favourite, under the name of Blue-eyed Mary, a delightful woodland plant, for though its flowers are not conspicuous, their pure colour is a joy. A large number of other species of *omphalodes*, mostly very beautiful, have recently come to our gardens. Some of them will probably prove to be at home in the woodland. The forget-me-not family (*Boraginaceæ*) has still other woodland members, for the alkanet, *Anchusa sempervirens*, with its leafy stems and intensely blue specks of flower, belongs here, and also *Trachystemon orientale*, a tall, coarse thing, but fine for a waste place on account of its very early panicles of quaint blue-purple flowers. The buttercup family offers us many very valuable woodland plants in addition to hepaticas. There are all the varieties of *anemone*





ERYTHRONIUMS, THE DOG'S-TOOTH VIOLETS.

of the nemorosa group—nemorosa itself, our wood anemone, with its many beautiful varieties—white, reddish and blue; *A. blanda* and *A. appenina*, both lovely blue-flowered things; and the striking *A. blanda* var. *Scythnica*, blue outside and white within; the little twin-flowered yellow *A. ranunculoides*. Then there is the taller *A. sylvestris* with its large, single creamy fragrant blossoms, and the dainty *A. narcissiflora* with fan-shaped leaves and many-flowered erect stems. The globe flowers (trollius) and the columbines (aquilegia) are all lovely, and include plenty of shade-loving plants. Then primula is a host in itself. For places of normal moisture we have all the varieties of the primrose, from white to blue, and all the polyanthus forms, and the favourite *P. Juliae*, etc. For moister places many of the great crowd of species now found in gardens have no objection to shade, but I cannot from experience indicate which are best in this respect.

I am rapidly exhausting the space at my disposal, yet only now come to two groups of plants which are among the most interesting and characteristic of those which we associate with shade culture—the one a small group of leathery-leaved things, mostly beautiful in flower and often difficult of cultivation; the other the large group of bulbous and tuberous-rooted plants, mainly monocotyledons, that are being used more and more for naturalising under trees.

In the first category come those elegant and distressing plants the pyrolas or winter greens, none really easy, and the most beautiful of all, the fragrant *P. uniflora*, almost impossible. The difficulty with the pyrolas, as with several others of the plants to be mentioned immediately, is to secure properly rooted pieces. In nature they straggle along, their slender stems half above and half below the ground, rooting only in the most tentative fashion; and when transplanted they linger for a long time, but finally decide to die. The one that I found easiest was *P. rotundifolia* var. *arenaria*, from the sand dunes near Southport, where, I believe, it still lingers in spite of the relentless encroachment of golf greens and bungalows. Then there is the attractive American *Shortia galacifolia* and the even better *S. uniflora* from Japan: lovely things, if only one can persuade their elusive roots to do their duty. *Galax aphylla*, also American, is easier than *shortia*, and its slender spires of small flowers are very dainty. The creeping *Tanakaë*

radicans is graceful and easy, making a mat of low evergreen, toothed leaves and runners with sprays of graceful white blossom. Like so many dainty things, it comes from Japan. One must not omit two most fairy-like tiny creeping things—the well known *Maianthemum bifolium*, which ramps about with its slender twin heart-shaped leaves and plume of white bloom; and the less common *Trientalis europæa*, a fragile but quite easy beauty, with appealing tiny white stars and delicate foliage. Of stronger creeping things we have the ever-welcome lily of the valley, *Convallaria majalis*, with its large form and its rosy flowered variant, and a variety of Solomon's seal, *polygonatum*, all highly decorative. Allied to these is the strange *Paris quadrifolia*, with its single yellowish flower rising from four leaves set like those of the wood anemone.

What are we to say of all the trilliums and erythroniums and dodecatheons and cypripediums? There are at least a dozen of each which deserve separate mention, for all are beautiful and of high value to the gardener. All love a deep, cool woodland soil, and once established are among the best delights of spring. But space forbids the adequate singing of their praises or displaying of their varied charms. They would need a long article to themselves. Indeed, the same applies to the many bulbs that can be so charmingly used in woodland gardening—galanthus and narcissus especially in great variety, scillas, leucojums and what not, and to start into them at this time of day would be futile.

Every plant hitherto mentioned is of perennial duration, and, indeed, annuals or biennials are rare in natural woodlands, and generally unsuited for introduction therein. But there is one glorious genus, mostly biennial, which is so beautiful in leaf and flower, and so varied, that it cannot be passed by, as many of its members are at home in a well drained forest soil. I refer, of course, to *meconopsis*. While many of the loveliest of the species are rather delicate and miffy little ladies, the stronger or better proved kinds, like *M. aculeata*, *M. integrifolia*, *M. paniculata* and *M. Wallichii*, are easily raised and easily grown, and have the distinguished beauty of their genus.



THE ATTRACTIVE SHORTIA GALACIFOLIA FROM AMERICA.



# THE HARDY BROOMS

**D**URING the last twenty-five years very important developments have taken place among several species of *Cytisus*, until to-day they rank among the most showy and useful shrubs for sunny borders. Their marked improvement may be attributed to three main causes: (1) natural or chance hybrids; (2) artificial pollination; and (3) selection and raising of seedlings.

For light, well drained soils in sunny positions, brooms should be much more widely planted. They are particularly useful for banks and shrubbery borders which are in full sun. Quite ordinary soil of a light character is preferable to a rich loam in which the plants may make abundant growth but do not flower nearly so freely.

Allowed to grow naturally, the tall-growing kinds soon become leggy. To counteract this, the shoots of the young plants should be cut back several times in the early years of growth; while older plants benefit by shortening the main branches each year immediately after flowering.

Seeds, cuttings and, in a few instances, grafting with the *laburnum* as a stock provide ready means of increasing broom in quantity.

## VARIETIES OF THE COMMON BROOM.

The rich yellow blossoms of the common wild broom, *Cytisus scoparius*, should be made much more use of by planters in our pleasure grounds, wild garden and open woodland, where not naturally wild. It not infrequently happens, when a few seedlings are planted in shrubbery borders and the wild garden, that seeds from these drop in favourable positions for germination and become established without the help of man.

Probably because a native British shrub, the common broom has not received the attention in most gardens undoubtedly it deserves, the discovery in Normandy about 1884 by the French landscape gardener, M. Edouard André, of a wild seedling broom with brownish crimson wing petals and named var. *Andreanus*, may have appeared to many people a small matter at the time. This departure from the type, however, has proved to be but the beginning of a most important and valuable addition to our hardy-flowering shrubs. As so often happens, once a plant varies from the type, remarkable and much wider variation rapidly follows.

The name of the late Mr. Tom Smith of Newry will always be associated with the early development of the first coloured variations from André's broom. Five distinct named varieties were distributed from the Daisy Hill Nurseries: Butterfly, bronzy red and yellow; Daisy Hill, creamy yellow and deep red; Firefly, the richest coloured form of *Andreanus*; Mayfly, red and yellow; and Newry Seedling, pale cream with rosy red blotch. Still further developments appear in the following named sorts: Daisy Hill *splendens*, pale yellow with rosy crimson keel; Dragonfly, golden yellow and rich crimson; Fairy, cream tinged rosy pink; fulgens, orange yellow, dark crimson keel; and Rosy Moonlight, cream tinged with rose.

To reproduce these beautiful varieties true they should be propagated by cuttings or grafted on seedling *laburnums*

Seedlings raised from *C. Andreanus* and the varieties show a very wide variation in colour; while there is always the possibility of a small percentage showing some improvement on the parent, the larger number are usually inferior in colour.

Quite a considerable number of other variations of the common broom are cultivated in our gardens. Newry Gold is one with rich yellow blossoms; sulphureus or pallidus, the Moonlight Broom, though not common, is an old variety (being described by Loudon eighty years ago), with pale yellow blossoms which provide a pleasant contrast to others richer in colour. The drooping or spreading broom, var. *pendulus*, is valuable for banks and for sprawling over boulders and ledges in the rock garden. The name *prostratus* is frequently used for these brooms in nurseries, but the true variety *prostrata* is much more close-growing and compact in habit. Of this I have only seen a form with yellow blossoms.

Cornish Cream is a new variety raised at Lanarth, Cornwall, by Mr. P. D. Williams. There are two shades of colour in the flower, the keel being several shades darker than the cream-coloured standards.

The Warminster Broom, *C. præcox*, a hybrid between *C. purgans* and *albus*, originated among a batch of seedling *C. purgans* in the nursery of Messrs. Wheeler of Warminster in the sixties of last century. It has sulphur-yellow blossoms produced in profusion at the end of April and during the first half of May. Effective in masses in the pleasure grounds, the Warminster Broom should not be planted in any appreciable numbers near the house because of the uninviting odour of the flowers. This broom increases readily from cuttings.

The white Portugal or Spanish Broom, *C. albus*, is a tall-growing shrub of graceful habit, readily raised from seeds, and the seedlings show some variation in habit and size of the flowers. The best can be selected and propagated by cuttings. The variety *incarnatus* or *roseus* has a tint of rose in the flowers and is especially noticeable when half expanded.

The beautiful hybrid broom raised at Kew in 1900, *C.*

*Dallimorei*, is said to be the first hybrid broom raised by artificial crossing. As the pollination was carried out under glass (*C. scoparius* var. *Andreanus* × *C. albus*), there can be no doubt of its origin, otherwise *C. purpureus* might be suggested as a more probable parent at first sight, as the flowers are a shade of rosy purple deepening to velvety crimson on the wing petals.

The parentage of *C. Dallimorei* is soon disclosed when seedlings are raised, as innumerable colours, ranging from pure white, through cream, yellow, forms of *Andreanus* and colours even richer than typical *C. Dallimorei* make their appearance.

Apparently the two new varieties, Donard Seedling and Dorothy Walpole, have the same parents as *C. Dallimorei*, or are selected seedlings from it. Donard Seedling has reddish crimson flowers suffused with a greyish cream, yellow and rose. In Dorothy Walpole the keel is rich rosy purple, with the wings a deep velvety crimson.

*C. Osbornii* is a very distinct seedling from *Dallimore's* Broom, raised at Kew, with pale yellow flowers and suggests *C. præcox*, but is a little later in flowering. The



A FINE PLANT OF CYTISUS KEWENSIS.



plants are rather more upright in growth, and in the bud stage the colour is deeper. An important consideration is that the odour of *C. præcox*, so offensive to many, is absent in this new variety.

Two late-flowering cytises are deserving of more attention from planters. *C. sessilifolius* is a native of southern Europe and northern Africa. Though first introduced about three hundred years ago and figured in an early number of the *Botanical Magazine*, tab. 255, the sessile-leaved broom is comparatively little known. It is a bushy shrub and averages about 5ft. in height, with rich yellow blossoms four to eight or ten together, borne in short racemes terminating new side growth on the main branches.

*Cytisus nigricans*, the so-called black broom, because the blooms turn black when dried, flowers freely during July and August. It is a native of central and south-eastern Europe, and was first introduced in 1730. Growing 4ft. to 5ft. or more in height, the yellow flowers are freely carried in slender racemes terminating the shoots of the year. If the plants are pruned fairly hard each year in February or early March it considerably increases the vigour and length of the flowering shoots.

When visiting the Newry nursery in August, 1915, I noticed seedling forms of the common broom, *C. scoparius*, still flowering. By selecting the latest to bloom a race of July and August flowering varieties had been obtained. Most of the bushes had yellow flowers, though several with the crimson stain of *Andreas* were noticeable. Seeds and plants have been disseminated to customers from Newry, but no doubt largely because of the war they are not much known.

#### DWARF BROOMS.

For the rock garden and grouping along the front of sunny borders, several dwarf cytises are of outstanding merit. *C. Ardoinii*, with yellow flowers, is free in growth and also very ornamental. It is notable as the parent of two dwarf



*C. ALBUS*, TALL GROWING AND OF GRACEFUL HABIT.

hybrid brooms: *C. kewensis* (*C. Ardoinii* × *albus*), of spreading habit and creamy white blossoms; and *C. Beanii* (*C. Ardoinii* × *purgans*), of spreading growth, with rich yellow flowers.

The purple broom, *C. purpureus*, is represented by the type with rosy purple blossoms and at least three distinct varieties—*albus*, *incarnatus* and *versicolor*. A. OSBORN.

## JOHN RICHARD ANDERSON, J.P.

HIS GARDEN DIARY, 1745. A NOTE BY THE HAND OF  
DION CLAYTON CALTHROP.

(Continued from page 286.)

MY friend does not merely dream his life away among his books or under his favourite tree, but endeavours to keep company with all manner of men whose conversation is not purely frivolous. He has as good a sense of humour as any man and can tell a story against himself with relish.

Among his notes he places anything curious that he hears or that comes under his immediate notice. For example, I find that he is at pains to discover the origin of the names given to flowers both wild and cultivated. "Some names," he writes, "seem to spring from no recognizable source yet they obtain up & down the countryside where a man will speak of the plant 'Good King Henry' not knowing it to be called also 'English Mercury.' Which King Henry can he mean?"

Of "Monk's Rhubarb" (*Rumea Patientia*) he can see clearly that it is a medicinal plant and comes under the order of Simples (which he often spells "ffimples") such as were collected and cultivated in those days when a knowledge of herbs was a necessary precaution in life. With these so-called pot herbs comes also Herb Patience.

In his day there were many wise women who brewed concoctions against all manner of evils and also as love potions. In the notes especially on herbs one finds names which at one suggest fragrance of both history and poetry.

"Sweet Marjoram," he writes, "what fragrant thoughts arise at the sound of such names as these. 'Herb Teucer,' 'Germander,' 'Wound Wort,' 'Wild Thyme' and 'Pennyroyal' and 'Meadow Sage.' In the twilight of Botany such names arose and bloomed through the night of the Dark Ages until the day broke, but in those mists a country Poet sang of simple things near to the Earth as Adam."

Did (this for a fancy) the Herb Twopence gain its name from the first financier and did that careful man give it its Latin name in order to hide the secret of his wealth from the ever greedy: "*Lysimachia nummularia*"?

Our country poet finds names in this green island awaiting him, to nameless plants and flowers he gives names by a god-fatherdom of his own, and as I read Mr. Anderson I see how justly he sets down not only the learned names but the little names, the first love names. But, mark you, he has method too.

March 1st. Now the Windes come fiercely bind your weakest Plants against they become prostrate. Now is the Time to sow Pinks and Sweet Williams and Carnations. Acquaint your Greenhouse and Conservatory gradually with the Air by Day but trust not the Night. Beware the sudden darking of the Sun and also the Frosts and sharp Winds. If the season be dry water your Anemony roots well once or twice a week. Be careful also that the East Winds do not prejudice your choicest plants, as Tulips and Jacynths but shelter them with Mats.

In April Mr. Anderson's advice is:

that you do now sow Hyssop, Basile, Thyme and Scurvey Grass. Entertain such Exotic plants as you may possess in fresh hot beds with the Art to preserve them and foster them during this Season.

It is now the time of Laycock, White Thorn, Musk, Florence Iris, Lady's Smock and White Violets.

This is the Time to distil Plants for Waters.

Set your Bees at Liberty but expect Swarms.

Note: Some say Gilly-flowers should be planted by Full Moon, but such sayings creep in from one knows not where. Though they be Heathen still the Heathen kept flowers and knew of many strange Devices.



For May Mr. Anderson notes that "Snails should be gathered after Rain. Set also tempting baits against the ravages of Insects. Now are flowering both white and blue Campanulas, as is also the Deptford Pink and Homer's Moly with many other flowers too numerous to set down."

He has his Duke, Flanders and Heart cherries, black, white and red, also the Luke-ward and Naples cherries, and at this time he has strawberries, corinths and melons.

In June he notes that "Aviary birds grow sick of their feathers so that he makes Emulsions for them of Melon and Cucumber seeds, and gives them Groundsel, and Chickweed &, if he has some, of the Pome-Granade seeds."

So placid a man as Mr. Anderson has a temper besides for the follies of the people who will not provide for themselves. "There are people in this world," he writes, "who have no thought for the Winter. They never dry a herb or pickle onions or the seeds of the Nasturtium, nor will they keep a Tub of Brine and lay by such pieces of Pig as the Ears, Tail, etc., which would serve them for the winter months. So I must ask my neighbours for old Cloakes & cast away shoes & many other things as old Linen, Medicines & Stale Bread. Mr. Endover doth give me wood for the cutting but Lord these fanglish people as soon cut themselves as wood and a man will as soon drink Gin and other Strong Waters and Smoak his pipe as tend his piece of garden."

Then follows, without due sequence of idea, a note: "The Bill of a Property Man to a Theatre. (Lord how strange to see how effects are come by.)"

	£	s.	d.
For Hire of Six Case of Pistols .. .. .	4	0	
A Drum for Mrs. Bignall in the Pilgrim .. .. .	4	4	
A Truss of Straw for the Madmen .. .. .		8	
Pomatum and Vermilion to Grease the Face of the Stuttering Cook .. .. .		8	
For Boarding a Setting Dog Two Day to follow Mr. Johnson in Epsom-Wells .. .. .	6		
For Blood in Macbeth .. .. .		3	
Raisins and Almonds for a Witches Banquet .. .. .		8	

In July he is at the perpetual war gardeners wage against insects. He straightens the entrance to his bee hives and sets about killing drones. Then he sets glasses of beer mingled with honey to entice wasps and flies, and he hangs these bottles near his nectarines and other tempting fruits. "Else

many times they invade your best Fruit." He seeks diligently for snails under the leaves of his mural trees and makes a decoction of tobacco refuse, brine, potash and water with which to water his gravel walks so as to destroy worms and weeds.

In August he makes his cider and perry, keeping his choice apples, such as the Ladies' Longing, Sheeps-snout and Cushion apples for the table. At Bartholemew-tide Mr. Anderson removes and lays his perennial greens, his jasmines and oleanders and translates them to moist and shaded ground.

With all these garden cares and delights Mr. Anderson is happy, but naturally he is not free from the ills the flesh is heir to. There are boys who break in and steal his choice fruit, there is swine fever in the neighbourhood, his favourite horse goes lame and himself suffers from a twinge of "that plaguey thing, the gout." He notes that "cats will eat & destroy your Marum Syriac if they can come at it." And that robbing insects and wasps must continually be destroyed.

"Last week," he writes, "comes Sir Abel Rawley out of the Town and brings me news of the Great World, but O how stale and unprofitable it is and sounds so in my quiet & peace. That Brocade Sword Knots be now worn, that Bat Pigeon is the only wigmaker of elegance; that Lady —, hath an affair with a low ill bred fellow: and how some madman preaches that a Plague will fall on the Earth by Christmas and utterly destroy all who go to Playhouses & Taverns, these things vex the ear and are vain & small in the country."

Now the good man is at seeing the autumn leaves are swept and gathered together to make good mould; he is taking care that his carnations do not get too wet and so rot. He is preparing against wind and frost, rolling his grass walks and finishing his last weeding.

Now Mr. Anderson prepares for the end of the year, cutting logs for his hearth, trenching his ground and digging in manure. He covers up his bees and turns the fruit in the store room lest it taint. His fruit trees are pruned and nailed to the walls and all in the garden is in order. The fountain pipes are covered with straw against the frost and the conservatory doors are looked to to see that they shut out the cold air.

Here is the last entry in this diary:

Dec. 31st. I do thank God for all His Goodness and Mercy to me in this year, guarding me from loss and from illness of any grave order. I thank Him for the abundant yield of Fruit and Flowers which are a solace to the mind causing man to live simple and in great content.

All flesh is grass. J. R. A.

## APHIDES OR PLANT-LICE

TO both farmer and gardener "blight" is a familiar word. It is well known that it is caused by a host of minute creatures which bear the scientific name of aphides. The term "green fly" is commonly applied to these insects—which include the green rose aphid, the woolly blight of apple and pear trees, the hop louse and the Phylloxera vastratrix (the vine aphid), which has at times caused such terrible losses to the vine industry in France.

Altogether there are some two hundred different species of aphides and (though often called "green fly") they vary much in colour. Those found on rose trees are certainly green, but those on beans are black. Others are brown and some are brilliant red.

The extraordinary life-history of these creatures may be of interest to readers. In the spring, female aphides hatch out of eggs laid during the previous autumn. These are



FIG. 1.—THE THISTLE APHIS.

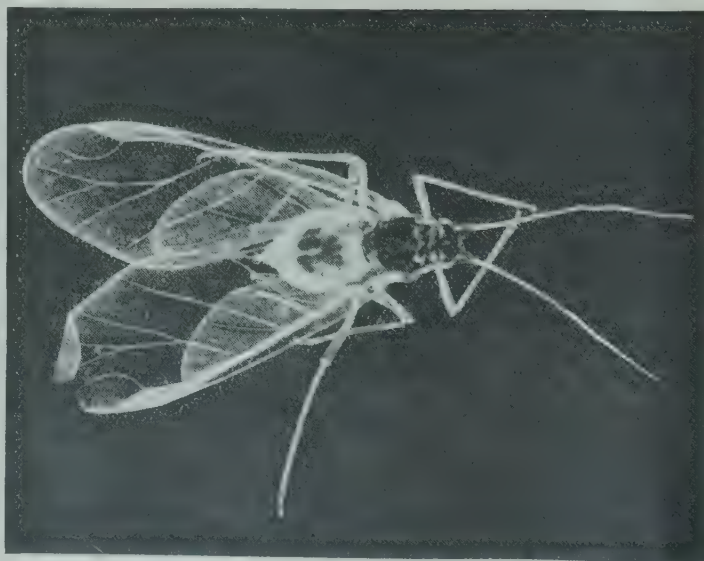


FIG. 2.—THE WINGED APHIS.



FIG. 3.—THE ANT



females without wings. They soon grow to maturity and give birth, not to eggs, but to females like themselves. The little ones soon grow up and begin to produce others, and so the process goes on for several generations. Then a strange thing happens. A generation appears which consists of winged aphides (Fig. 2). The wingless aphis is a slow-moving creature and only crawls leisurely over the leaves, but the winged aphis can fly away in search of richer food. It has been noticed that directly a winged generation appears that these will migrate to another feeding ground. The aphis found on apple, for example, produces a winged generation which migrates to the stem of corn and then they produce another which lives on this particular form of food.

Towards autumn a small race appears which consists of males and females. These pair and eventually the females lay eggs which hatch out the following spring, and so the wonderful process of reproduction is repeated year by year.

The extraordinary prolificacy of these creatures accounts for the myriads which exist. Huxley has stated that a single aphis would produce in ten generations descendants (if they all survived) which would "contain more ponderous substance

than five hundred millions of stout men; that is more than the whole population of China." Fortunately for us, the aphides have many enemies. Among them the ladybirds, which practically live on them. Bonnet, the famous naturalist, said that as we sow grain for our benefit, "Nature has sown aphides for the multitude of insects." Looked at from another point of view, were there no enemies of the aphides, then men would have little food and would gradually be exterminated by "blight."

Ants (see Fig. 3), which are perhaps the most intelligent of all insects, make use of aphides for their own benefit. They actually "keep" them as we keep cows. The aphides produce a substance known as honey-dew, a favourite food of many insects. Fig. 1 is a photomicrograph of a thistle aphis much magnified. A peculiar structure will be noticed in the pair of syphons at the lower part of the insect. These were at one time thought to be the organs which produced the honey-dew. But this is not true. They are wax-producing organs, and from them comes a substance similar to that made by the honey bee. The honey-dew is formed in the alimentary canal of the insect.

G. H. HEWISON.

## A FINE CRAB APPLE, *MALUS HALLIANA PARKMANII*

THE Arnold Arboretum at Boston is famous for its large collection of crab apples. Especially when the Chino-Japanese species and forms are in flower they are quite a sight. Among the double-flowered forms there is none that can be compared with the variety *Parkmanii* of Hall's apple. This is the true *Kaido* of the Japanese.

Before it came to Europe it had been sent to America, where it flowered first in the garden of Francis Parkman near Boston. The type, too, of *M. Halliana* came first to America in 1863 by G. R. Hall, after whom it has been named. Its origin had been doubtful for quite a time, until it was found by E. H. Wilson in a wild state in western Szechuan, near Tachien-lu. When I was dealing with the genus for my illustrated handbook in 1906, I saw a specimen collected by Fortune at an unknown locality in China that had been referred by Hemsley to *M. spectabilis*. I stated that it probably belonged to *M. Halliana*. In foliage and flowers this species certainly much resembles *M. spectabilis*, which has not yet been collected in a wild state, but is said to come from northern China. It has been known in Europe since 1780, but is unknown even as a cultivated plant in Japan. *M. spectabilis* has much larger fruits, with a persistent calyx which is deciduous in *M. Halliana*. The nearest ally to it is *M. theifera*, a very handsome apple, widely distributed in the mountain regions of western China into Assam. When in flower it looks more like a cherry than an apple, and it is of great horticultural value. Its flowers are,



ONE OF THE BEST DOUBLE FLOWERED JAPANESE CRABS.

however, pure white, while in *M. Halliana* the rose coloured flowers are much more conspicuous. Of the variety *Parkmanii* the colour of the flowers almost equals that of a peach. The fruits of *M. Halliana*, as well as of *M. spectabilis* and *M. theifera*,

are of no beauty. Of *M. Halliana* the fruits have the size of a large pea, they ripen very late in the fall and become brownish red. The illustration shows a flowering plant in the Arnold Arboretum in May, 1916. CAMILLO SCHNEIDER.

## SERVICE FOR READERS

Though so many subjects are dealt with in each issue of THE GARDEN, it must constantly happen that readers seek information which is not immediately available. In such circumstances they should make use of our new Service Department. Through its medium each reader's own particular enquiry can be dealt with. No matter what the question is, whether advice is sought as to—

RESTOCKING A GARDEN, COLOUR SCHEMES FOR GARDENS, THE BEST PLANTS FOR CERTAIN SITUATIONS, WHERE TO OBTAIN NEW AND RARE PLANTS, INSECT PESTS, NAMING OF PLANTS, AND THE HUNDRED AND ONE OTHER DETAILS RELATING TO THE GARDEN—

there is always information available from a staff of expert contributors and consultants; and there is no charge for this. It is one of the additional means of Service which THE GARDEN is glad to render to its readers.

Also, there is the further convenience which the Service Department affords of supplying readers with data about anything that is advertised in the pages of the paper. Thus, on receipt of an enquiry, particulars will be sent of, say, half a dozen things about which the reader seeks information. The only stipulation is that a stamped addressed envelope shall be sent with the enquiry.

All communications should be addressed to the Service Department, THE GARDEN, 20, Tavistock Street, Covent Garden, London, W.C. 2.



# MORE ABOUT THE CHELSEA SHOW

## SWEET PEAS

Growers of sweet peas under glass had many anxious moments before the Show, but the welcome change in the weather set their minds at rest, and they were able to display most beautiful spikes of bloom. With their magnificent arrangement of general greenhouse annuals, Messrs. Carter and Co. had many splendidly grown spikes, which were noteworthy for the length of stem, as well as for the size and brilliance of mass colours. Besides a wide range of the standard varieties, which are well known to all sweet pea lovers, they had some excellent new sorts. Ruffles, lovely rosy lavender of large size; Mrs. H. Byford, glowing with fascinating shades of pink; Beacon (its orange colour lit up the collection splendidly); Purple Beauty, well named; Queen Marie, a valuable bicolor with an orange standard and crimson lake wings; Mrs. A. Searles, bright cerise; Enid, pale cream; Superb,

A skilful arrangement was also shown in the very extensive collection of Messrs. Dobbie and Co., where many lovely new sweet peas were to be seen. Magnet is a fascinating salmon pink; Ruby well describes the colour of this rich variety; Mermaid is of lavender tone; while Royal Sovereign, one of the best of orange coloured sweet peas, provided a mass of glowing colour. Then there were three sorts which are probably the best trio ever raised abroad. These are Sylvia and Miss California, of most fascinating pink shades, and both received awards at last year's trials. The third is Youth, a chaste and lovely picotee-edged flower. Of the older sorts space will permit mention of only Constance Hinton, the best of whites; Majestic, cream; and Grenadier, a glorious scarlet. One of the very best of their large vases is as yet unnamed, and is known as Lavender No. 100, a most lovely flower.

Novelties in sweet peas were also freely shown by Messrs. Alex. Dickson and Sons.

over, so that their true shape and form could not be fully appreciated. The increasing popularity of the Parrot tulip was clearly shown by the number of this type exhibited. They are very effective, but the selfs are hard to beat, especially massed in beds or borders.

Messrs. Dobbie and Co. had a splendid collection of tulips, varieties of Cottage, Darwin and Parrot tulips were chosen. Dido was a large, handsome flower, orange-red in colour and edged with yellow. King George was a good carmine-red Darwin tulip and Swanenburg (white), Harry Veitch (a deep crimson), Farncombe Sanders (scarlet), Euterpe (mauve), Isis (brilliant crimson), Violet King, Julie Vinot (a soft rosy-pink), and International (purple), were others belonging to the Darwin class. Cottage tulips, too, were well represented, and among them were some very fine colours, with the exception of some of the bronzy and bluish-mauve tulips, which are not considered beautiful by the majority of gardeners. Walter T. Ware was a lovely golden yellow Cottage tulip, Zany, an effective striped crimson, The President a rich orange, and at the back of the stand the Parrot tulip Markgraaf made a striking effect, with its wide open yellow petals striped with red.

An even larger exhibit of tulips of every class was staged by Messrs. Barr and Sons. The varieties they were showing were particularly interesting. A strange coloured tulip was Viridiflora, with its green and yellow petals. Quaintness was another distinct variety. Loveliness, a rosy pink; Isis, a brilliant crimson, shaded blue at the base; and Salmon King, were some of the Darwins shown. Ronald Gunn is a poor coloured tulip and is not effective. Mrs. Kerrel was a pretty shaded rose and amber Cottage tulip. Some of the yellows and oranges were exceptionally fine on this exhibit. Mrs. Hoog was a beautiful clear, light yellow. Gesneriana lutea and Inglescombe Yellow, two deeper yellows, stood out against the glowing red of Feu Brilliant and the deep shades of Zulu.

Groups of Petrus Hondius, Isis, Professor Rawenhoff and Mr. Farncombe Sanders, made vivid patches of colour among the tulips exhibited by Messrs. R. H. Bath. Countless varieties were shown by this firm, and the flowers were large and of good shape. Zomer-shoon was an attractive white and red variety; John Ruskin, a large apricot flower, and Faerie Queen, a mauve with yellow edged petals, together with Moonlight, Perfecta, Scarlet Perfection and Opal were a few of the best.

The Maytham Gardens selected a few of the self-coloured tulips to form their exhibit. In many ways the individual varieties can be better appreciated by this arrangement, but it does not cater for the varied tastes of the general public. Ellen Willmott, a clear primrose yellow; Mrs. Potter Palmer, purplish crimson; King Harold, blood red; La Tulip Noire; and Faust, both very dark, together with Orange Perfection and Chestnut, were some of the best varieties in this group.

Tulips from the Welsh Bulb Fields were staged by Mr. W. A. Watts. Several varieties which were seen on this stand were exhibited by no other firm. Panorama, a rich chestnut red Breeder; Tak Van Poortvliet, a dark red; Gustav Doré, a pale rose Darwin; Solomon, a mauve Cottage; Ida Scott, a deep mauve Darwin; and Marcella, a bright reddish maroon, were typical of the varieties exhibited. Neither Corydon nor Crepuscule were good colours, but the soft shades of Amber and Psyche are suitable for massing with some of the deeper tints.



MESSRS. BOLTON AND SONS EXTENSIVE COLLECTION OF SWEET PEAS.

of Picture type and rich pink flushing; Geisha, old ivory colour delicately flushed with the palest pink; and Raynes Park, silvery lavender, are the names of most of their novelties of decided merit.

Novelty sweet peas were also freely shown by Messrs. Robert Bolton and Son, and chief among them was the wonderful silvery lavender Wembley, which was the silver medal variety at the trials of the National Sweet Pea Society last summer. Royal Pink is a rich glowing flower, reminiscent in type of that ever popular variety, Picture; Black Bess is the nearest approach to a black sweet pea that has yet been seen—smoky maroon is, perhaps, the best description of its colour. Ivory Picture, which won a certificate of merit last year at the trials was shown in even greater beauty than at the Syon House gardens. Besides these splendid new sorts, Messrs. Bolton and Sons had an extensive collection of the older sorts, such as Picture, Mrs. Arnold Hitchcock, R. F. Felton, Powerscourt, Wizard, and all were of the same high quality and arranged with great taste.

Mermaid, pale lavender; Magnet, vivid pink shaded with salmon; Crusader, orange pink; Dainty Maiden, a large flower of blush pink colouring; and Stella, a magnificent cream picotee with a definite rosy margin, were the names of the most striking. Among the standard sorts worthy of mention were Faerie Queen, Purple Perfection, Hawlmark Pink, and the lavender Powerscourt. Besides these and many more, they had vases of four seedlings of considerable merit.

## TULIPS

There were quite a large number of tulips exhibited this year, and when the weather conditions before the Show are taken into consideration, it was a pleasant surprise to see such good collections. Many of the same varieties were shown by each exhibitor. At the beginning of the Show the tulips looked in perfect condition, but very soon they opened too widely and began to bend



Mr. J. Pearson had a good stand of tulips, and among them Inglescombe Pink, Feu Brilliant, Farcombe Sanders and Andromache, were very effective. Frans Hals, clear violet; Orange King; Velvet King, a shining velvety purple, with a clear yellow base; Retroflexa superba and Marconi, were a few of the best.

Several fine varieties were shown by Mr. Ernest Paul, and among them Yellow Picotee, Yolande, Honeymoon, Prince of Wales, the bronze orange La Merveille, the soft apricot Darwin Afterglow, Roi Soleil and Wilberforce.

Some of the tulips of Messrs. Toogood and Sons, Limited, were very good in form, and the flowers were borne on long strong stems. Parisian Yellow, one of the tallest yellow May-flowering tulips; William Pitt, a glowing deep scarlet Darwin with a blue and white base; Princess Elizabeth, a vivid rose Darwin; and Europe, a scarlet Darwin shaded rose and with a pure white centre, were the most noticeable varieties.

The only ground group of tulips was staged by Mr. Herbert G. Longford. Blocks of separate varieties were bedded in moss; the exhibit could have been more effective if brighter and better coloured varieties had been selected. Some of those chosen were Nora Ware, a silvery lilac; Bronze Queen, a bronzy orange; Moonlight, a large primrose yellow flower; Bartigon, a carmine crimson, edged with purple; and William Copeland, a mauve shaded Darwin.



THE MAGNIFICENT GROUP OF TULIPS STAGED BY MESSRS. DOBBIE AND CO.

In the trade groups the most interesting was that of Messrs. Oliver and Hunter, Moniaive, Dumfriesshire. As readers are doubtless aware, this firm specialise in the genus, and the evidence that they meet with unqualified success in their cultivation is furnished by the well grown plants of many species and varieties which they put up. From the dwarf and rather rare *Primula aurantiaca*—perhaps better known to enthusiasts as 21501 Forrest—to the tall, handsome and more common *P. pulverulenta*, one met all grades. In the sikkimensis clan, there were several plants of the type species which, if examined closely, showed the enormous variation which is met with in this species. Another member, *P. flexilipes*, of more slender habit than sikkimensis and with uptilted green bells of a pale yellow colour, was also there. The dainty *P. Girdiana* was representing the muscaroides group and was characteristic with its white mealy stems and handsome slightly drooping violet flowers. A few elegant plants of the giant form of *P. Littoniana*, one of the most popular of the muscaroides, were also there. The large deep lilac cones of this species attracted considerable attention on this table. The candelabras were also to the fore in such species as *PP. Beesiana* and *pulverulenta*; while *P. Cockburniana* was near by with its almost

flame-coloured flowers. *P. anisodora* was there and is always interesting with its dull maroon flowers with a narrow yellow eye. This species might be tried in any future hybridisation work. The results, if successful, would doubtless be full of interest, as the progeny would carry, we should think, unusual coloured flowers. There were many others here, but space forbids a more detailed report. It suffices to say that the primula lover could have spent a most interesting hour comparing the various species, noting their characteristics and learning their peculiarities.

Dr. Macwatt, as is his wont, staged an excellent little table of species and hybrids. *PP. capitata*, *Mooreana* and *crispata* were all there upholding the *capitata* group, so characteristic with their mealy stems and dense flower clusters. *P. Veitchii*, representing the *cortusoides* set, was there, while close by was the dainty *P. scotica* and the graceful *P. effusa*. *P. chionantha*, with its white flowers and sturdy foliage covered with a light, almost golden, meal, was the delegate of the *ivalis* group, which contains some of the best of our early-flowering primulas. That rather difficult "doer," *P. Forrestii*, was present, looking quite happy alongside well grown plants of *P. Rusbyi*. These were, to some extent, overshadowed by the taller and more handsome *PP. Littoniana* and *sikkimensis*, but, nevertheless, have a charm all their own. That Dr. Macwatt is still a power to be reckoned with in the world of primulas is unquestioned, and we can only await with expectancy what the exhibit may bring forth in the way of novelties next year.

Another exhibit of note was that of Lady Aberconway and the Hon. H. W. MacLaren of Bodnant. Many rare gems, including *P. Reidii*, were to be seen here all looking well, although, unfortunately, when these notes were written, several had not unfolded their dainty blossoms. *P. aurantiaca*, which flowered for the first time at Kew last year, was there, with its pretty yellow flowers shading to a deeper yellow in the eye. It is not exactly a species whose beauty enraptures one, but, nevertheless, it holds its own peculiar charm. Of the *cortusoides* set, we noted *P. lichianensis*; while the purple *secundiflora* was there from the sikkimensis section. Of the "Maximowiczii" section we found *P. szechuanica* with its floppy flowers and reflexed petals of rather a disappointing greenish yellow colour. The foliage, however, is attractive, with almost white veining on a

## HARDY PRIMULAS

Of late years, there is no genus of plants save rhododendron which has come so much before the public eye as the primula. From a mere handful of species twenty years ago, the number has gradually increased year by year until now they run into hundreds. China—that wonderland of trees and flowers—has supplied the majority of these, and the horticultural public owe a debt of gratitude to those amateurs, and no less to the collectors, whose enthusiasm and keenness have resulted in such a wealth of brilliant species and forms of this ideal rock garden and woodland denizen. From the cliffs and woodland glades of China is a far cry to these islands, yet, notwithstanding their new climatic conditions, the plants staged at Chelsea would do fair to rival their Chinese relations.

That a boom in primulas has arrived was very evident by the large numbers which were staged by many firms in their rock garden exhibits and also by others, such as Dr. Macwatt, who made them their sole attraction.



A CORNER OF MESSRS OLIVER AND HUNTER'S EXHIBIT OF PRIMULAS.



light green ground. One of the marsh forms, *P. Wardii*, was present, showing the enormous variation in its flower colour from lilac to mauve. Another interesting species was *P. spærocephala*, with its mauve mop-headed flower clusters covered in meal. The dainty and fine violet flowers of *P. effusa* were to be seen nestling beside well grown plants of *P. Forrestii*; while the lilac rose nodding flowers, almost white with farina, of *P. chrysopa* also called for admiration. There were many other interesting ones about which much could be written, but space forbids. In conclusion, we offer our congratulations to these keen amateurs and also to their gardener on their excellent exhibit, which was full of interest.

The only other sole exhibit of primulas was that staged by the Aldersey College. This consisted of well grown plants of *P. helodoxa* laid out in grass, producing a most effective and natural result.

The majority of the alpine exhibitors included either a few species or hybrids on their stands. *P. pulverulenta* and hybrids including the Bartley strain were especially common. Messrs. Bakers included such species as *Cockburniana* and *helodoxa*; while the Chalk Hill Nurseries had *Bulleyana*, and Messrs. Bees the rare *P. chrysopa*.

The primula exhibits were on a much higher level than last year, and the standard of excellence reached this year by the majority of the exhibitors will be found hard to equal and still more so to surpass.

## ALPINE PLANTS

Although the rock plants did not include many new introductions or thrilling rarities, they showed an even greater variety than last year and, in spite of the backwardness of the season and the earliness of the Show, very few half-hardy plants were called in to help the display. So that a generous opportunity was given to the rock gardener of making personal acquaintance with a very large number of species, almost all of them easily grown and many of them uncommon.

Of general tendencies it could be noted that *Gentiana angulosa* seems to be gaining appreciation as a vigorous, large and easy form of *G. verna*. *Gentiana pyrenaica* made a rather tentative appearance on several stands, but its colour, gentian blue suffused with violet, which is exquisite in even a small clump, is too subtle to show to advantage in a single flower, and as yet only very young plants are being exhibited. If it proves more tractable in cultivation than heretofore, it will be a most valuable re-introduction. It was shown by Messrs. Clarence Elliott and Co. and Messrs. Maxwell and Beale.

*Aquilegia flabellata* was shown by so many exhibitors that it may be hoped that this beautiful and easy Japanese columbine will soon become more widely known and appreciated. It is quite a dwarf plant, making a clump of fat, grey-green foliage about 8 ins. high and carrying its large flower, of pure white (sometimes faintly tinged with lavender about the spurs) very freely on short, stout stems.

Another, much rarer and very interesting columbine, *A. viridis*, was shown among the new plants by Mr. G. Blaythwayte, and has a fantastic elegance to match its remarkable colour. Two other rock plants, a form of *Anemone sylvestris*, were shown by Messrs. Jones and Ingwersen, and *Viola pedata bicolor* by Messrs. Bowell and Skarratt.

Messrs. Prichard and Co. showed several uncommon plants, including a valuable new introduction in two species of *cyathodes*, little heathery plants from the New Zealand alps with small, waxy-white trumpet flowers

very sweetly and strongly scented. *C. Fraseri* is slightly more compact than *C. ericoides*, but both are quite dwarf. They are said to have proved perfectly hardy in this climate. The same firm showed *Heeria elegans*, a Mexican of rather doubtful hardiness but well worth the precaution of taking cuttings to see the winter through in a cold frame. It forms a close mat of dark green oval leaves, from which it throws out long trailing stems each carrying a single large flower, suggesting a four-petalled *rubus* of deep magenta. *Cistus umbellatus*, white flowered and very neat and refined made a good background to it. Other interesting plants were the delicate shell pink form of *Ramondia pyrenaica* and *Galium olympicum* that imitates a slab of very dense moss till it becomes covered with its small greenish white flowers.

Messrs. Cheal showed *Erodium macradenum* with apple blossom pink flowers whose two upper petals are marked with a spidery blot of inky purple; *E. amarum*, a dwarfier woollier form of *E. absinthoides*, with a profusion of white flowers just flushed with pink; *Ourisia coccinea* in a form which really does flower; and *Viola Thuringia* a jaunty harlequin seedling of *V. tricolor* with the upper petals velvety violet and the lower white with one sharp notch of the violet.

Messrs. Clarence Elliott and Co. showed a good dwarf form of *Primula farinosa*, deep pink and in some specimens almost red; *Orchis ustulata*, a minute pyramid of flowers in lavender and white chintz with chocolate-coloured buds at the apex; a finely flowered specimen of *Daphne rupestris*; *Ranunculus parnassifolius*; and *Viola septentrionalis*, a cheerful rampant white violet from America with a blackish violet eye and pencilled eyelashes.

Messrs. Reuthe showed a fine large bush of *Erinacea pungens*, a silvery, spiny hummock set with bright lavender pea flowers and quite hardy on light soil, though it comes from Spain; *Erodium petræum* with grey, ferny leaves and flowers faintly flushed and delicately veined with pink; *Plantago nivalis*, a plantain that has strayed into the mountains and become covered with long, silky white hairs; and *Cornus suecica*, one of our rarest native plants, a woodlander, suggesting a minute trillium with a black centre.

Mr. Frederick Wood of Ashted showed a deep pink hybrid of *Anemone sylvestris*, "Merton Rose," which gives the picture of a very slender single-flowered *Anemone japonica* (a new introduction); a good mossy phlox, Clear's Seedling, which covers a very dwarf and compact cushion with smallish flowers of a warm deep lavender; some hearty clumps of *Oxalis enneaphylla*, whose great peal white goblets are so surprisingly large for such a small plant and harmonise so well with the cool grey-green leaves.

Messrs. Waterer showed the very choice *Iris gracilipes* with lavender flowers, curiously frail and silken for an iris, carried on stiff, wiry stems; *Roscoeæ cautioides*, that carries its crinkled flowers of luminous sulphur yellow a little awkwardly, a defect that deserves to be remedied by careful selection; *Wahlenbergia serpyllifolia*, and *Pinguicula grandiflora*.

Messrs. Gavin Jones and Ingwersen brought together a collection of rare and very interesting plants. *Linaria nevadensis*, flowering for the first time in England, a slender, trailing snapdragon with velvety brown flowers almost black at the lip, a curious and beautiful colour; *Genista horrida*, a very dense silvery hedgehog covered in summer with golden gorse flowers; *Potentilla fragiformis*, with thick, hairy strawberry leaves and soft yellow flowers nearly zins. across with a faint ring of orange at the centre; *Myosotis spathulata*, a dense mat of small spoon-shaped leaves scattered, though rather sparsely, with stemless white forget-me-nots,

a new plant from the Antipodes; *Ranunculus graminifolius*, throwing up heads of glorified and stiffly distinguished buttercups from a tuft of grey, grassy leaves, an admirable plant, though seldom seen in gardens.

Messrs. G. H. Crow showed well grown plants of *Dianthus neglectus*, a deeply coloured form of *Viola Bosniaca* and *Malvastrum Monroanum*, a good plant with trailing sprays of crushed strawberry flowers, but not safely hardy except in a warm wall.

Messrs. E. Scaplehorn showed *Lewisia columbianum*, a rare plant in cultivation, which gives the impression of a large-flowered *Saxifraga Cotyledon*, though the white flowers are faintly flushed with pink and delicately veined with red; *Dianthus versicolor*, a seedling variety of *D. neglectus* that opens white and slowly turns deeper and deeper pink, giving a pleasant soft effect in a large clump.

The Backhouse Nurseries showed *Rosa Rouletti*, which appears among the new plants, and a general collection of well known and well grown plants.

Messrs. W. H. Rogers and Son showed their dwarf conifers, *Cupressus tetragona minima* and *cæspitosa*, tight little mounds of dark green, the latter a little more rugged in outline than the former; *Pinus beaumontensis*, a miniature Scots pine that is making a welcome reappearance in commerce; and *Erodium chamædrioides rosea*, throwing up a profusion of delicately pink flowers from a dense mat of dark green leaves.

Messrs. Whitelegg showed, among many other plants, *Stachys corsica*, the one really attractive hedge nettle; and Harpur Crewe, the old soft yellow double wallflower with a sweet scent of mignonette that nearly dropped out of cultivation but has been rescued and revalued as it deserves.

Hemsley's Nurseries contrasted the weird eccentricities of their succulents with the prim daintiness of *Androsace lactea* and the elegance of *Erodium pelargonifolium*, whose blotched petals faintly suggest an *odontoglossum*.

Messrs. Skelton and Kirby's exhibit was notable, among other things, for *Erysimum rupestris* (pulchellum), a very neat little alpine wallflower in sulphur yellow.

Messrs. Rogers of Pickering seemed to specialise in aromatic plants. *Origanum aureum*, a compact golden marjoram; *Thymus nitidus*; and a thyme with white flowers densely spotted with crimson named *T. puciflorus*.

Sheppard's Nurseries showed the white form of *Papaver alpinum* and *Potentilla ambigua*, whose flat, golden flowers are so unexpectedly large for the neat tufts of grey-green foliage.

Messrs. Bakers of Wolverhampton showed *Haberlea virginialis*, which comes nearer than most albinos to improving upon the type, and a rather greyish form of *Meconopsis rudis*.

Messrs. Maxwell and Beale showed *Gentiana pyrenaica* and clumps of *Andromeda tetragona*, both belying their reputation by looking very vigorous and hearty.

Messrs. Tucker's miniature garden was very beautiful in the mass, and also included some interesting individual plants. *Oenothera Nuttallii* with solitary evening primroses on a rosette of spidery dandelion leaves; *Daphne arbuscula*, rather like *D. petræa* growing into a little tree instead of a bush; the magnificent large form of *Edraianthus serpyllifolius*; and several happy and healthy plants of the most distinguished and challenging of high alpine, *Androsace pyrenaica*.

Mr. J. Wells, jun., showed *Trifolium uniflorum*, a prostrate clover from Asia Minor, not a very brilliant thing in itself, but useful as a dull rosy purple carpet for more brilliant plants, such as *Geum Borisii*, which made a great patch of old gold near by it.



## STOVE AND GREEN-HOUSE PLANTS

Though gardening nowadays is much more an affair of the open air than it used to be yet there is usually a tolerably good collection of stove plants at Chelsea, while splendid strains of the more usually grown greenhouse plants are always on view. The display this year was of rather more than average quality, and the climatic conditions tended to keep the less hardy exotics happy-looking.

For combined richness and brilliance of colouring there was no exhibit to compare with Messrs. Blackmore and Langdon's splendid bank of double begonias in the first section of the great tent. Every plant was of perfect habit and furnished with blossoms of the largest size and most perfect camellia form. One could select no particular variety as surpassing the rest in beauty, but the orange-apricot Lord Lambourne attracted attention because of its bold massing, and the rich shell-pink colouring and bold petals of Hilda Langdon was noted by almost every visitor. For a perfect blending of brilliant colours this exhibit would be hard to surpass. Diversity was, as usual, provided by basket begonias on tall stands.

For conservatory decoration or for a fine display at exhibition, there are few flowers to rival the newer hybrid *hippeastrums* (*amaryllis*) and, at some past Chelseas, displays by Sir George Holford have aroused the greatest admiration. There was no separate display of the flower on this occasion, but two groups in Messrs. Carter's handsome exhibit contained many first-rate varieties. The Raynes Park firm associated with these some admirable *gloxinias*, including separate groups of the velvety mauve Premier and the white-throated rosy crimson Cyclops; with Star *cinerarias* and the ever-improving butterfly plants (*schizanthus*), besides various hardy and half-hardy annuals commonly used for exhibitions and for conservatory work at this season—*clarkia*, *salpiglossis*, *Phlox Drummondii* and so forth.

After an hour or so's inspection of flaming mollis azaleas, sweet peas, rhododendrons, pot marigolds and so forth, one's eyes ache for the cooler colouring of foliage plants, and the palms in the Orchid Tent (described elsewhere), another exhibit of hardy *cypripediums* near by, the garden of grasses outdoors and the *caladium* groups indoors received at least as much admiration as their more brilliant neighbours. One always looks for an exhibit of *caladiums* at this Show by Messrs. John Peed, but on this occasion it was a remarkably fine group by an amateur, Mr. H. B. Brandt (gardener, Mr. H. Cook), which first met the eye. It would be difficult so to arrange these fine foliage plants that any lack of harmony could be noted; nevertheless, this was a very clever bit of grouping with light and shade cunningly contrived and a nice balance of mass and colouring. With an almost bewildering number of varieties, each exceedingly beautiful in its own way, it was not easy for the amateur to select a few of the best for his own culture, but most people would consider Mikado with foliage in tones of purplish red and bronzy green as good as any among the heavier shades; while Triomphe de L'Exposition, dusky green, veined and reticulated red and rose, makes a strong appeal in the middle colour range, and fine plants of *Caladium Guil Mar*, the neat little spotted Sir Ernest Shackleton and *Mercédès d'Argent* took the eye among those of more delicate colouring.

Messrs. Peed's *caladiums* were duly found, and a very good lot they were, but used on this occasion as a foil for various flowering greenhouse and stove plants. The newest *gloxinia*-throated *streptocarpus* were largely shown, including some of almost salmon

pink colouring; and it is along this line that further advance should be looked for, size and substance of bloom being now almost all that can be desired. The herbaceous *calceolarias* in this group were noteworthy, being of good habit and having a fine range of colouring, while the "pockets" were large and "fat." *Gloxinias* and *codiæums* (*crotons*) were also well shown.

On Messrs. Webb's exhibit were to be found again almost all the kinds (barring the *hippeastrums*) found in Messrs. Carter's exhibit, but here the large-flowered and star *cinerarias* made the greatest impression, the numerous plants of "Webb's Superb" large-flowered strain being surely as near perfection as this beautiful flower can be expected to reach. The star varieties were, in their way, equally good. Of the *gloxinias*, *calceolarias* and *schizanthus* it must suffice to say that they upheld the reputation of the firm for these well known specialities. It is to be hoped that no one at the Show who admires *Primula obconica* overlooked the two groups of richly coloured "gigantea" on show. It is a pity, however, that the blue clings so firmly to the red with this species, thus making the more deeply coloured forms useless for indoor decoration. Altogether a very worthy exhibit.

Mr. H. J. Jones' exhibit of hortensis *hydrangeas* at last year's Chelsea gave most of us an entirely new conception of the possibilities of the plant, but his effort this year was lighter in arrangement and even more bewilderingly effective. He had a large number of varieties on show, certainly, but the most striking feature was the chameleon-like character of the different sorts. Mme. Moullière is, of course, white or green always, but there was Marechal Foch in every tone from rose through purple with a brilliant blue eye to blue; and Blue Prince, as often as not, was a study in rose and green. Stretches of brilliant blue were, at least in some instances, Mme. Riverain, while corresponding drifts of almost salmony rose proved to be Lancelot. Goliath, Radiant and Parsival were also noteworthy, and the daring combination of vivid green and blue in some plants of the first mentioned would be hard to match with any other flower. Some visitors obviously admired the hortensia, others struggled hard to avoid expressing admiration, but no one could ignore this most impressive group.

Messrs. Godfrey and Son showed a very fine compact strain of *Schizanthus grandiflorus*, which in sheltered localities should be good for summer bedding as well as for conservatory and indoor decoration.

Messrs. Watkins and Simpson also had a fine group of *schizanthus* covering a very wide and effective range of colouring, but even more notable was their strain of *cineraria* which they call "multiflora." This has the freedom to flower of the star varieties, with a compact habit comparable to that of the large-flowered strains. The individual blooms are shapely, intermediate in size between the large-flowered and the "stars" and self-coloured. The colour range is wide, and includes some very beautiful tones. A strain of *Salvia splendens* called Harbinger retains the normal gorgeous colouring of the type, is of good habit, and specially notable in that the bushy plants on show—and smothered in blossom—had been grown from seed in four months. Only those who have raised *Salvia splendens* from seed will properly appreciate what an advance this denotes.

The *schizanthus* was much in evidence this year. Another fine group of this flower was noted on the stand of Mr. Alfred Dawkins, but these "dwarf hybrids" were obviously nearer the *wisetonensis* set than the *grandiflorus*. Beautiful rosy tones were much in evidence, and the habit of the plants left nothing to be desired.

The zonal *pelargonium* is no longer a favourite flower, yet its bright colouring and ease of culture should commend it to the amateur who wishes a gay display at almost any season. Mr. R. J. Case had a very bright display which included the salmon-rose Taurus, the double salmon The Speaker and the quaint starry Fascination. The brilliant rosy scarlet ivy-leaved variety Sir Percy Blakeney was also in evidence.

Messrs. Jarman and Co. supplemented their incomparable sweet sultans with bunches of zonal *pelargonium* blossom and plants of a number of kinds of scented-leaved *pelargoniums*, which, like other kinds with scented foliage, are fast returning to favour. Star *cinerarias* were also shown.

Messrs. L. R. Russell set up a fine group consisting almost entirely of the choicer stove species, though the nearly hardy *Hoya carnosa* (just opening its waxy bloom trusses) was included. Splendidly flowered specimens of *anthurium* and the pretty *Clerodendron Balfouri* stood out from a grouping of *caladiums*, *codiæums*, *aralias* and *dracenas*. Of the last named *Père Charon* and *Victoria* were especially attractive.

Messrs. James Cypher and Sons in a group mainly consisting of orchids had fine plants of the very useful *Statice intermedia* and also brilliant *anthuriums*.

## PALMS & SUCCULENTS

Messrs. Robert Green, Limited, had a large collection of palms, and many of them were fine trees. Large specimens of the spineless palms, *Kentia Belmoreana* and *K. Fosteriana*, were exhibited. The glaucous leaflets of *Cocos australis* were effective, and very graceful were the spineless palms, *Areca Baueri* and *A. sapida*, whose pinnate leaves form terminal clusters. *Chamærops Fortunei*, the fan-leaved palm, and the noble *Phoenix canariensis*, which is of rapid growth, and the pygmy *Phoenix*, *P. Roebelinii*, with its shiny, dark green leaves, were among the collection. *Raphis flabelliformis* and *Cocos flexuosa*, were also in good condition.

Two groups of succulents were exhibited and both were varied, and the plants were remarkably healthy. These curious plants possess a fascination of their own, and although they are not grown to any large extent, small collections of tiny succulents growing in bowls are becoming very popular. Mr. S. Smith had the largest exhibit, and many interesting specimens were among his plants. *Echinocactus Grusonii* was looking in very good condition; *Cereus flagelliformis*, with its long, snake-like growth; *Mamillaria pusilla*, with whitish flowers about to bloom; and the thick columnar *Cereus Roezlii*, were all noticeable.

Miss S. S. Thompson staged the other exhibit of succulents. Minute pots of healthy-looking plants were very attractive. *Mesembryanthemum tigrinum*, the hairy *Pilocereus senilis*, *Opuntia clavarioides* *Mamillaria stellata* and *M. haageana*, were noticeable.

## ORCHIDS

Sir Jeremiah Colman, Bt., Gatton Park, Surrey (gardener, Mr. Collier), was awarded a gold medal for an exquisite group of rare species and choice hybrids. Among the former were finely grown examples of *Aerides crispum*, *Maxillaria Sanderiana* and a varied assortment of *Masdevallias*. One of the interesting features was the splendid type of *Lycaste Skinneri*, the vigorous plants had many flowers of fine substance. *Dendrobiums* were well represented by varieties of Gatton Sunray and illustre; while *cymbidiums* included selected varieties of *Pauwelsii*, Emery and President Wilson. *Odontioda* Lady Colman and Oda. Madeline were noteworthy for



their brilliant reddish colour. *Lycaste locusta*, with large dark green flowers, proved most interesting to many of the visitors.

Messrs. Charlesworth and Co., Haywards Heath, received a gold medal and the congratulations of the Council for a magnificent group, every plant being displayed to its fullest effect. The centre was composed of many plants of *Odontoglossum crispum* xanthotes and other white-flowering kinds, thus making a fine contrast to the red-flowering odontiodas on each side. Among the newer hybrids were distinct odontonias, many miltonias with blotching on the labellum, and some well coloured brasso-cattleyas. *Lælio-cattleyas* were best represented by *Fascinator*, which is still a favourite; while cymbidiums were noted in *Ceres* with three vigorous spikes of carmine-coloured flowers.

Mr. H. T. Pitt, Rosslyn, Stamford Hill (gardener, Mr. Thurgood), was awarded the challenge cup given by the trade orchid growers, thus winning it for the second time. His group contained many rare species such as two finely grown plants of *Bulbophyllum macrobulbon*, fine forms of *Cattleya Mendelii*, *Cattleya citrina*, with its pendulous flowers of citron-yellow colour, and a large

favourite of many years ago, also *C. intermedia* Aquinii, with its petals flushed with purple, and alongside of it the remarkable *C. Suavior*, which has the petals similarly coloured. *Dendrobiums* were another feature of this exhibit, and there were many well flowered examples of the popular kinds. Masses of red were imparted by well flowered plants of *Renanthera Imschootiana*, and at each end was a large batch of *Lælio-Cattleya* G. S. Ball, with numerous flowers of orange-red colour.

Messrs. Cowan and Co., Southgate, N., were awarded a silver cup for a neatly arranged exhibit, the back of which was composed of the bright yellow *Oncidium Marshallianum*, and various cymbidium hybrids, including *C. Beryl*, with a boldly marked lip, and fine varieties of *C. Pauwelsii*. A feature of this exhibit was the section of albino cypripediums, these embracing *Maudia*, *Emerald*, *Curtisii* Sanderæ and *callosum* Sanderæ, in all of which the typical purplish colour was absent. *Lælio-Cattleya Hassallii* alba, with a couple of large flowers, occupied a central position, and among the odontiodas mention may be made of *Grenadier*, with a branched spike of reddish flowers, and

with a deep rose. Among the cypripediums was a distinct form of *Lawrenceanum*, with greenish flowers, also *C. Godefroyæ*, of round formation.

Messrs. Flory and Black, Slough, received a silver-gilt Banksian medal for the best group of cattleyas. Considering the dull season, this exhibit was very praiseworthy. Fine examples were staged in *Tityrus*, of large size; *Heatherwood*, equally attractive; and *Empress Frederick* var. *Vesuvius*, of rich colour. Albino cattleyas included *Irene* and *Magali Sander*, pure white except for some yellow in the throat; and *The Bride*, in which the yellow is entirely absent. The well known *Cattleya Mendelii*, formerly seen in quantity at the spring shows, but now scarce, was here staged in a variety having the labellum of violet-purple.

Mr. Harry Dixon, Wandsworth Common, was awarded a silver Flora medal for an effective exhibit containing two large plants of *Ansellia africana*, somewhat darker than usually seen. On each side were selected varieties of *Lælio-Cattleya luminosa* and *L.-C. Martinettii*; while in front were most of the popular cypripediums of the spring-flowering type.

Messrs. Sanders, St. Albans, received a silver Flora medal for a small but choice selection of species and hybrids, the former including *Bifrenaria pubigera*, with pretty flowers; *Cymbidium Devonianum*; select forms of *Odontoglossum crispum* and *Cypripedium insigne* Sanderæ, the latter flowering out of season.



THE CENTRE PIECE OF ODONTOGLOSSUM CRISPUM ON MESSRS. CHARLESWORTH'S STAND.

plant of *Ansellia africana*. Among the cypripediums were *Enchantress*, with flowers of emerald-green colour, and the pretty *glauco-phyllum*. *Miltonia* William Pitt, of rich crimson colour, came in for well deserved appreciation.

Mr. Albert C. Burrage, Beverly, Mass., U.S.A., created a most unexpected spectacle by sending over a large quantity of hardy New England cypripediums, accompanied by pine trees and American ferns, the whole consignment weighing upwards of five tons. The plants came over early this year in cold storage and were brought into flower in Mr. E. M. Preston's garden at Hayes, Kent (gardener, Mr. Woods). This unique exhibit was recognised by the award of a silver-gilt Lindley medal. Mr. Burrage has very generously presented the whole of this exhibit to English gardens, the recipients being Sir Jeremiah Colman, Bt., Lieutenant-Colonel Sir George Holford, K.C.V.O., and the Royal Botanic Gardens, Kew.

Messrs. Stuart Low and Co., Jarvisbrook, Sussex, were awarded a silver cup for a meritorious exhibit containing many excellent cymbidium hybrids, also a large plant of *Cymbidium Loweanum concolor*. Among the cattleyas was *C. Mossiæ Arnoldiana*, a

Murillo, with many scarlet-coloured flowers.

Messrs. Cypher and Sons, Cheltenham, received a silver-gilt Flora medal for an attractive exhibit in which the centre was composed of *Brasso-Cattleya Digbyano-Mendelii*, with immense flowers having the expansive labellum prettily fringed. On each side were well grown plants of *Cypripedium Maudia* and *C. Lawrenceanum*, while in front were excellent specimens of *Masdevallia* species. *Lælia purpurata*, one of the favourites of the old Temple shows, was here seen in perfection; also *Lælio-Cattleya Fascinator*, and some strong plants of *Dendrobium formosum* with large white flowers. An attractive plant was staged in *Cypripedium macrochilum giganteum*, with three curious flowers, the petals being considerably elongated. *Lycaste Skinneri* showed up well, and a pretty *odontoglossum* of yellow colour was seen in a hybrid named *Eva*.

Messrs. Mansell and Hatcher, Rawdon, Leeds, were awarded a silver-gilt Flora medal for a group containing numerous examples of *Lælio-Cattleya Fascinator*, always effective at this period of the year. *Cattleya Schroederæ* and *C. Mossiæ* stood out prominently, the latter being represented by a variety named *striata*, in which the segments were stained

## NEW & RARE PLANTS

### FIRST CLASS CERTIFICATE.

*PÆONIA OBOVATA ALBA*.—A popular description of this beautiful plant might well be a herbaceous peony with delicately beautiful reddish purple tinted leaves and bearing dazzling white magnolia flowers. The purity of the white cup-shaped flowers is enhanced by the little cluster of bright yellow stamens and green purple-tipped stigmas. It is a native of Hupeh, China. Shown by Mr. J. C. Allgrove.

### AWARDS OF MERIT.

*ANEMONE SYLVESTRIS* SPRING BEAUTY.—This is a greatly improved variety of the snowdrop windflower. The solitary, rounded milk-white flowers are borne on downy stems about a foot in height, rising well above the dwarf cut foliage. Shown by Messrs. G. Jones and Ingwersen.

*AZALEA COQUETTE*.—A hardy deciduous azalea of uncommon type. Its appearance suggests a hybrid between Ghent and occidentalis varieties, but no information was forthcoming. It may almost be described as a Ghent azalea with larger and more widely expanded flowers, which are of soft pink colour with a yellow standard.

*AZALEA MARIAN MARRIMAN*.—Of similar type to the foregoing, but of bright yellow colour with orange spots and flushing on the standard.

*AZALEA MARY WATERER*.—Another beautiful hardy azalea of the same type and lovely creamy white colour lightly flushed on the outer parts of the petals with apple-blossom pink. There is just a suggestion of yellow in the centre of the flowers. These three lovely hardy deciduous azaleas were shown by the executors of the late Mr. Anthony Waterer.

*AZALEA MARY*.—This is stated to be a cross between *A. malvatica* and *A. Kämpferi*. In general appearance it is a larger-flowered example of the dwarf Japanese azaleas, which are shown so frequently during the spring. The flowers are of bright rose pink colour with carmine spots on the upper segments. Shown by Messrs. T. H. Van Nes.



**CARNATION RED LADDIE.**—A reddish old rose coloured sport from the well known variety Laddie, which Mr. Engelmann has shown so consistently well for many months past. The new variety has somewhat larger flowers of splendid shape on long, graceful stems, and its uncommon colour will make it a very popular variety. Shown by Mr. C. Engelmann.

**DIOSMA UNIFLORA.**—This is a shrubby plant bearing wiry erect stems furnished with narrow linear leaves crowned with five-petalled, widely opened flowers rather over an inch across. The lovely flowers are of milk-white colour, and each petal has a rosy carmine line running from its base half-way up the centre. Shown by the Rev. A. T. Boscawen.

**PRIMULA NIVALIS.**—A Chinese primula. It makes a fairly dense tuft of long, fleshy, strap-shaped leaves of dark pea green colour, and from these rise slender stems oins. to 12ins. high crowned with heads of flattish deep lilac flowers with white eyes. Shown by Mr. A. K. Bulley.

**RHODODENDRON A. GILBERT.**—Apparently one of the half-hardy hybrids. It bears a large truss of creamy pink flowers which are flushed with rose on the outer parts of the petals. Shown by Mr. T. H. Lowinsky.

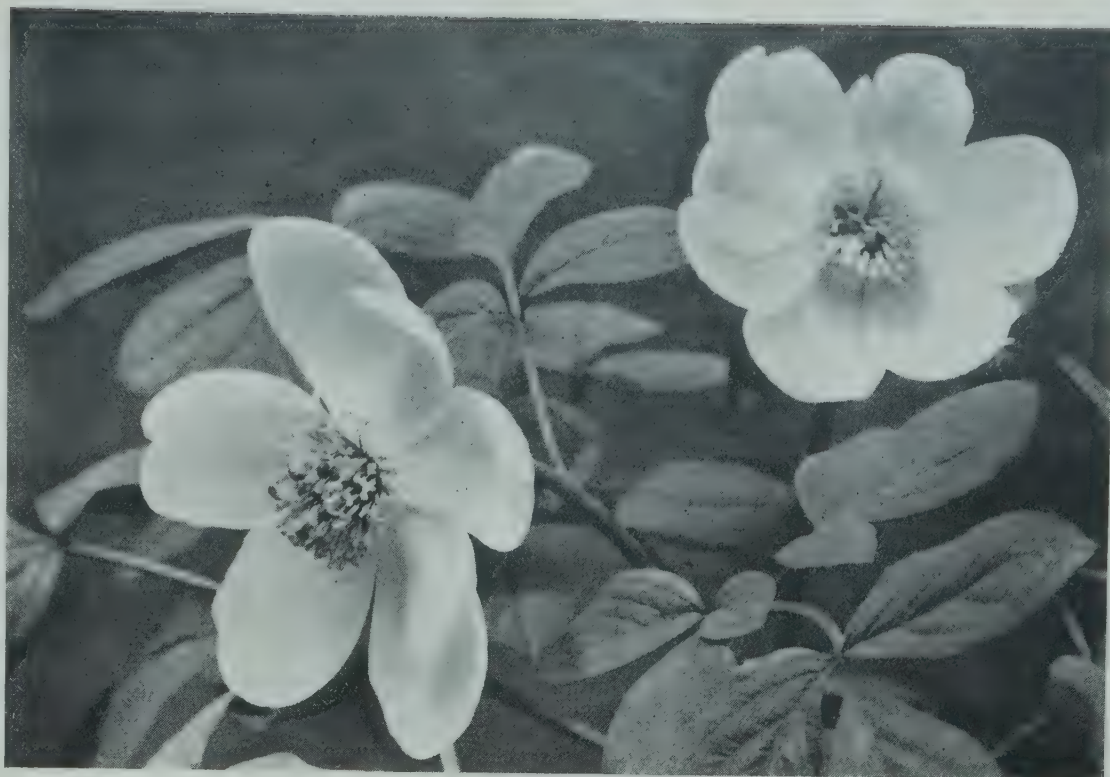
**R. TITTENHURST BELLE.**—A most beautiful "Riviera" variety, obtained by crossing R. Aucklandii with a Corona seedling. It has a particularly long, erect truss, perfectly furnished with large flowers most delightfully stippled with rich blush pink. The central stem and stalks of the flowers are stained deep crimson. Shown by Mr. T. H. Lowinsky.

**R. GLORIOSA.**—A large truss of beautiful blush pink flowers which are shaded to a darker tone on the edges. The stalks are of reddish purple colour. Shown by Messrs. R. Gill and Son.

**R. GOLDSWORTH YELLOW.**—The great garden value of this hardy hybrid rhododendron was well seen in the large group on the grass. It is a compact grower and bears medium-sized trusses of deep primrose yellow flowers spotted with green on the upper segment. Shown by Mr. W. C. Slocock.

**R. LEDOIDES.**—A tiny little plant from China, only a few inches high, was shown, and this bore five trusses of fascinating miniature tubular whitish flowers. Shown by Mr. A. K. Bulley.

**R. T. H. VAN NES.**—A brilliant hybrid



THE HANDSOME MAGNOLIA-LIKE BLOSSOMS OF PEONIA OBOVATA ALBA.

rhododendron bearing large trusses of widely expanded flowers of pale blush colour which is deeper on the outer parts of the flowers. Shown by Messrs. T. H. Van Nes.

**TELOPEA OREADES.**—It is an erect-growing large shrub bearing entire leathery ovate lanceolate leaves and dense heads of rich crimson flowers of similar shape to those of Eriobothrium coccineum. The telopas are known as "waratahs" in Australia. Shown by the Rev. A. Boscawen.

**ROSA SUPERBA.**—A dwarf perpetual polyantha rose of great beauty. The compact floriferous trusses have small fully double flowers of deep crimson colour very slightly flushed with plum purple. Shown by Messrs. Wm. Cutbush and Sons.

**STAPHYLEA HOLOCARPA.**—Flowering sprays of a deciduous shrub, which is a native of Central China. Flowers of a whitish-pink hanging in short corymbs. Very fine. Shown by Sir George Holford.

## ORCHIDS.

### FIRST CLASS CERTIFICATES.

**LÆLIO-CATTLEYA HASSALLI ALBA**, Cowan's variety (L.-C. Britannia × C. Warscewiczii).—This handsome hybrid bore a couple of large flowers, the sepals and petals of thick texture, creamy white, the roundly formed labellum bright purple with a narrow margin of white, the throat bright yellow. Shown by Messrs. Cowan and Co., Southgate, London, N.

**ODONTIODA HIAWATHA VAR. ROYALTY** (Oda. Charlesworthii × Oda. Coronation).—A beautiful hybrid bearing an erect spike of eleven flowers of rose tint, the sepals and petals almost covered with brilliant rose-scarlet, thus making a most attractive object. From Messrs. Charlesworth and Co., Haywards Heath.

### AWARDS OF MERIT.

**CATTLEYA CHELSEA** (C. Empress Frederick × C. General Pulteney).—One of the finest cattleyas in the Show. The two flowers were large, the petals broadly developed and of erect habit, deep mauve, the immense labellum crimson-purple, crisped at the margin and with gold veining at the apex of the throat. Exhibited by Messrs. Flory and Black, Slough.

**CATTLEYA SUAVIOR VAR. HERCULES** (intermedia Aquinii × Mendelii).—The best variety yet seen of this interesting hybrid, in which the peloriate nature of the first mentioned parent is perpetuated in a marked degree. Flowers of rose colour, the petals heavily flushed with purple at the extremity, thus resembling the purple coloured labellum. Shown by Messrs. Stuart Low and Co., Jarvisbrook, Sussex.

**CYMBIDIUM VIRGO VAR. GUINEA** (Pauwelsii × Woodhamsianum).—One of the showiest of the popular cymbidium hybrids. The vigorous plant carried an extended spike of eighteen large flowers of greenish gold colour, the labellum having a crimson band on the apex of the front lobe and spotting of similar colour on the two lateral lobes. Shown by Messrs. Stuart Low and Co., Jarvisbrook, Sussex.

**ODONTOGLOSSUM CRISPUM VAR. PRISCILLA.**—One of the finest of the garden-raised plants of this species. The spike had been disbudded to four flowers, which were very large, the petals almost meeting in front of the dorsal sepal. Segments slightly tinged with light rose, the labellum having a few



THE MILK WHITE FLOWERS TINGED WITH ROSY CARMINE OF DIOSMA UNIFLORA.



reddish spots. This plant also carried a seed-pod. Shown by Mr. Robert Paterson, Stamperland, Cathcart, Glasgow.

**ODONTIODA ORESTES VAR. MAJESTICA** (Oda. Coronation × Odm. percultum).—The tall spike of this hybrid bore seven flowers with roundly formed segments of a pleasing rose tint and slightly spotted with reddish purple. Exhibited by Messrs. Cowan and Co., Southgate, London, N.

**MILTONIA PRINCESS MARY VAR. MAJALIS** (Bleuana × Hyeana).—The horizontally produced spike bore four large flowers of the well known M. vexillaria habit. Sepals flushed at the base with crimson, the petals to a much stronger degree, labellum stained with rose, and with a ray-like mask of brownish colour at its base. Staged by Messrs. Charlesworth and Co., Haywards Heath.

**CYMBIDIUM VICTRIX** (Venus × Alexanderi).—This elegant hybrid bore two erect spikes of large buff yellow flowers, the labellum having a brownish zone around the apex. Shown by Messrs. Sanders, St. Albans.

#### CULTURAL COMMENDATION.

**ODONTIODA CORA VAR. PRINCESS** (Oda. Coronation × Odm. eximium).—An excellent cultural result, in which the inflorescence consisted of nineteen large flowers, with well developed colouration. Staged by Messrs. Charlesworth and Co., Haywards Heath.

**ODONTIODA WEST POINT BEAUTY** (Oda. Bradshawia × Odm. eximium).—A truly remarkable result of cultural ability was seen in this plant, the branched spike carried no fewer than seventy-six well developed flowers of purplish-rose colour. Shown by Messrs. Charlesworth and Co., Haywards Heath.

## SUNDRIES

On either side of the long avenue leading from the Hospital entrance to the rock gardens, exhibits of horticultural sundries of every kind were packed tightly together. Along the main entrance as well, more garden requisites were displayed. It was interesting to compare the products of the various firms and to examine all their latest inventions.

Spraying and limewashing machines which were sound in the principle of their design and in material were exhibited by the makers, the "Four Oaks" Spraying Machine Company. The "Four Oaks" "Battle" pattern is one of the best spraying machines on the market for work on a large scale.

Messrs. C. H. Pugh, Limited, were showing "Atco" motor mowers of various sizes.

Tools, insecticides, fertilisers, syringes and all kinds of garden requisites were shown by Messrs. Smith and Ellis, Limited. A small hand sprayer exhibited by this firm has caused many enquiries. This pneumatic machine is called the "Con-o-mist" sprayer, and it is certainly easy to use and quite efficient.

Messrs. James Carter were exhibiting Royal Doulton flower bowls and vases as well as glass vases, and a great variety of sundries. Tools, knives, fertilisers, etc., were there in plenty.

Messrs. Ransomes, Sims and Jefferies, Limited, the great lawn mower firm, had a selection of their mowers.

Messrs. Samuel McGredy and Son, the Irish rose growers, had an exhibit of rose accessories: Fertilisers, insecticides and a fungicide called "Kuremil," prepared for the prevention and cure of mildew.

A sweet perfume came from the stand of Messrs. Allwood Brothers. Among packets of carnation seed and tins of carnation fertiliser were bottles of perfume made from this firm's own carnations.

Messrs. John Shaw and Sons were showing the "Governor" lawn mower both with and without an extra roller attached.

Messrs. Bakers had an exhibit of strong wire netting and supports for hard tennis

court surrounds. This is a line in which they specialise.

Lawn mowers and rollers were shown by Messrs. A. Shanks and Sons, a firm who manufacture some of the most reliable and long-lasting of all lawn mowers. Every kind of lawn mower, including those driven by motor, were displayed.

Among the spraying machines, fertilisers, slug-killers and insecticides on the stand of the Stonehouse Works Company was a handy appliance for distributing fertilisers called the Stonehouse Duplex Distributor.

Messrs. Thomas Green and Son, Limited, had a collection of lawn mowers, and among them there could be found mowers to suit every type of lawn.

A patent and remarkably cheap pruner, known as Camp's "P.C." Pruner, which met with favour from many people, was exhibited by the makers, Messrs. Camp and Co.

Messrs. Abol, Limited, had an exhibit of all the famous "Abol" syringes, spraying machines and spraying mixtures.

Major C. Walker was exhibiting his fruit tree protectors suitable for wall fruit, bush tree fruit and fruit plantations.

Messrs. Robinson Brothers, Limited, were showing, among other sundries, "Carmona" Plant Food, "Velvas" lawn sand, "Multiple" worm-killer, watering cans, tools, syringes and spraying fluids.

Mr. J. Singleton was very busy selling his patent watering can attachment which does away with the need for a rose. The "Nue-spray" attachment can be fitted to any size of can.

Mr. John Pinches was showing, besides weather-proof labels, plant-holders and bloom-protectors.

The Chase Continuous Cloche Company were showing vegetables and flowers which have been grown under their cloches. The plants were much in advance of those grown without protection. The firm was also showing a fruit-storing stand.

Hundreds of little plants in square "Fibrex" pots attracted much attention. They were exhibited by Mr. J. N. Harvey. In these pots transplanting difficulties are greatly reduced, as the plant is not removed from the pot but planted without disturbing the pot in which the roots are embedded.

Messrs. Woodworkers, Limited, had two most useful propagating frames which looked to be perfectly sound.

Several blocks of turf, showing the beneficial effects of a special fertiliser, were exhibited by the Key Fertiliser Company.

The House and Garden Sundries Company were exhibiting wall clips, fruit protectors and various horticultural requisites.

Messrs. Corry and Co., Limited, the makers of the well known Corry's white fly fumigant, had insecticides and manures.

A reagent for the conversion of straw, bracken or any garden rubbish into synthetic farmyard manure was exhibited by Messrs. Adco, Limited.

Heating apparatus interests chiefly the owners of large greenhouses; to them the exhibit of boilers manufactured by Messrs. Jones and Attwood, Limited, would appeal.

Vegetables and fruit fertilised by the plant food supplied by Messrs. Prentice Brothers were shown on the stand of this firm. Pure Ichthemic guano, "Tomorite," lawn sand, potato fertiliser, etc., were there.

"Katakilla," a special winter wash, hand sprays and a slug-killer were exhibited by Messrs. Cooper and Nephews.

Every imaginable horticultural requisite was exhibited by Messrs. Thomas Gunn, Limited.

The Willmott Rival Plant Stakes, patented by Mr. H. J. Greenwood, are among the quickest to fix and most invisible of any plant stake.

A cheap rustless and adjustable plant-holder, named the "Ideal," was exhibited by Mr. E. Sydney.

Messrs. Martineau and Smith had a large exhibit of spraying machines and syringes.

The "Diamond" extension ladders, which Messrs. Drew, Clark and Co. were exhibiting, have been reduced in price.

Pneumatic spraying machines were shown by Messrs. Holder-Harriden, Limited.

The J. P. Super Lawnmowers, Limited, were demonstrating the merits of adjustment of their mower by hand wheels; all the working parts being enclosed and running on ball bearings in an oil bath.

The Dryad Cane Furniture Company exhibited "Dryad" cane chairs and tables.

The Cooper-Stewart Engineering Company, Limited, were demonstrating the "Rain King" lawn sprinkler and the "2-Purpose" Rain King sprinkler.

Horse boots, sprinklers, spike rollers, lawn sand distributors, shoe-cleaning apparatus comprised the exhibit of Messrs. Patisson and Co.

"The Sprayer of a Thousand Uses" was exhibited by the Eclipse Spraying Company.

Messrs. Dennis Brothers were exhibiting the motor lawn mower which gained an award of merit for its excellent work at the R.H.S. motor mower trials held recently.

The Acme Patent Ladder Company had an exhibit of ladders, steps, barrows and trestles.

The bird-boxes in the exhibit of Messrs. Arthur H. Moorton, Limited, were an interesting feature. Sundials, bird-baths and garden ornaments were also shown by this firm.

A varied and good exhibit of garden ornaments, paving both in stone and sand-faced brick, was staged by Messrs. Sanders and Co.

Garden tents, ornaments, garden chairs and other furniture were shown by Messrs. A. W. Gamage, Limited; Harrods, Limited; W. Wood and Son; Sutton and Sons; and Gaze's, who also showed hard tennis courts.

Messrs. Skinner, Board and Co. showed two "Wire-tension" greenhouses; D. Swain and Co., greenhouses, frames, etc.; and W. Duncan Tucker and Sons, Limited, greenhouses and frames.

Messrs. Charles P. Kinnell and Co., Limited, had a large exhibit of greenhouse heating apparatus, boilers of kinds such as the "Robin Hood," the "Bisson" and the "Rochford." They were also showing radiators for heating a winter garden.

A variety of ornaments in artificial stone were shown by Messrs. Pulham and Sons.

Mr. Ernest Dixon had a few teakwood garden chairs and tables by the side of his sunk garden.

Owing to lack of space, we are unable to complete the list of sundries until our next issue.

## OFFICIAL LIST OF AWARDS

#### CHALLENGE CUPS.

*Sherwood Cup*, for the most meritorious group (excluding orchids): To Messrs. C. Engelmann, Limited.

*"Daily Graphic" Cup*, for the best rock garden: To Mr. G. G. Whitelegg.

*Cain Cup*, for the best exhibit by an amateur: To the Hon. Sir John Ward, K.C.V.O. (gardener, C. Beckett).

*Orchid Challenge Cup*, for the best exhibit of orchids by an amateur, on a space not exceeding 60 sq. ft. Only those may compete who employ not more than three assistants in orchid houses (including the head gardener): To H. T. Pitt, Esq. (gardener, F. W. Thurgood).

#### SPECIAL CUPS.

*Allwood Carnation Bowl*, for the best group of carnations exhibited by an amateur: To Sir William E. Cain, Bt. (Executors of the late).



# CARNATIONS for Garden & Greenhouse

## PERPETUAL FLOWERING (Greenhouse) Varieties

We carry large stocks—rigidly selected—of all the best varieties. For immediate flower we offer fine plants in 6" pots in bud. Young stock, ex 3 1/2" pots, stopped and broken, to pot along, or plant, ready now.

All Collections are carr. and packing paid for cash

6 plants in variety	6" pots	ex 3 1/2" pots
12 " "	24/-	8/6
25 " "	45/-	16/-
25 " "	80/-	30/-

## ALLWOODII (Half Pink, half Carnation)

New and delightful self colours have been introduced in the ever popular Allwoodii—the hardy plant which grows and flowers in every garden and window-box. The collections quoted below are exceptional value, and include many quite new and unique varieties. 6 plants in variety, 6/6 12 plants in variety, 12/- 25 plants in variety, 22/6

## HARDY PERPETUAL BORDER CARNATIONS

Will eventually supersede the old Border type, being hardier, freer flowering, carrying bolder and more sweetly perfumed flowers. A much wider range of colour is now obtainable, and the following collections are first-class value, embracing many of the later kinds. All plants ex 3 1/2" pots—immediate delivery. 6 plants in variety, 15/- 12 plants in variety, 27/6 CATALOGUE of all CARNATIONS POST FREE ON REQUEST but order the above collections at once for prompt delivery, and exceptional value.

The leading Carnation Raisers and Specialists in the World.

Dept. 4, Haywards Heath, Sussex.

# HERBERT'S GOLD MEDAL PINKS

Acknowledged to be the finest in the World. Unsurpassed for border or pot culture, of robust constitution, free flowering, unique colouring, and delightful fragrance. Received Ten Awards of Merit. Lists Free.

H. HERBERT, Nurseries, Hazelwood Road, Acock's Green, BIRMINGHAM

# REAMSBOTTOM'S ANEMONES

Gold Medal St. Brigid

(None Genuine without our Gold Medal Seal.)

12, 3/-; 25, 5/6; 50, 9/6; 100, 18/-

Plant now for b'oom from late Summer onwards throughout Autumn and Winter.

Miss Campbell, Harewood, Seaton, Feb. 21st, 1925 writes:—"The St. Brigid Anemones I had from you (MAY, 1924) were VERY beautiful and are in bloom now."

Please write for Current Price List of Choicest Flowers for planting now.

PLEASE MENTION "THE GARDEN" WHEN WRITING.

REAMSBOTTOM & CO., TOWER NURSERIES, WEST DRAYTON, MIDDLESEX.

## WM. ARTINDALE & SON, NURSERYMEN—SHEFFIELD

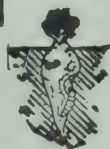
Winners of the

SIR ALBERT STEPHENSON SILVER CUP AT THE SOUTHPORT FLORAL FETE FOR GLADIOLI

—CATALOGUES ON APPLICATION—

Please mention THE GARDEN when writing.

## KILOGRUB



Exterminates all Garden Pests in the soil. Your Seedsman has it.

Tins:—9d., 1/6, and 2/6.

Bags:—2-cwt. 6/6; 2-cwt. 9/6; 1-cwt. 15/-.

Write for particulars to the manufacturers:—JOHN PEAK & Co., Ltd., Wigan, Lancs.

## GRAND YORKSHIRE FLOWER SHOW AND GALA, YORK 17th, 18th and 19th JUNE, 1925.

£750 OFFERED IN PRIZES for groups of Stove and Greenhouse Plants, Orchids, Carnations, Begonias, Sweet Peas, Roses, Cut Flowers, etc.

Gold and Silver Medals for Trade Exhibits.

For Schedules, apply to—ARTHUR ANDERSON, Secretary, Assembly Rooms, York

Please mention THE GARDEN when writing

## GOLD MEDAL FOR DAFFODILS

INTERNATIONAL SHOW HAARLEM 1925

THE WELSH BULB FIELDS, ST. ASAPH

Please mention THE GARDEN when writing.

# Abol

## Aids to a Perfect Garden

Abol Specialities are used and recommended by experts. They are always reliable, economical and safe, and are now recognised as standard horticultural requisites.

## Abol Non-poisonous Insecticide

A sure-kill for Green Fly, American Blight and other insects. Without equal as a remedy for mildew on Roses, etc. Used in the Royal Gardens. 1/2 pt. 1/4; pt. 2/2; qt. 3/4; 1/2 gall. 5/3; gall. 9/6.

## Abol Patent Syringes

Give a perfect spray which may be varied from fine to medium or coarse, as desired. Specially recommended by the National Rose Society. Last a lifetime.

No. 4 (1x14), 16 4; No. 5 (1x20), 21 -; No. 6 (1 1/2 x 20), 26/- Bend extra, 1/6

## Abol White Fly Compound

A safe remedy for White Fly on Tomatoes and Cucumbers. Economical and easy to apply. Simply pour down centre path of the house at 2 1/2 fluid ozs. to 1,000 cubic feet. From 1/4 pt. 1/- to gall. 15/- Postage extra.

## Abol Special Manures

For Roses, Sweet Peas, Chrysanthemums, Tomatoes, Potatoes, and Hop Manure; also Abol Horticultural all-round Fertilizer.

## Abol Weed Killer (Poison)

An extremely reliable and economical preparation, which entirely eradicates weeds from garden paths and walks, carriage drives, etc. In liquid and powder forms, both equally effective. Liquid: 1/2 gall. 4/-; gall. 7/6; 2 galls. 14/6. Powder: to make 12 galls. 2/-; 25 galls. 3/6; 50 galls. 6/-; 100 galls. 11/6.



Write for descriptive folder and "Guide to Garden Pests," gratis and post free.

Sold by Nurserymen, Seedsmen, Florists, Chemists, Ironmongers and Stores.

Sole proprs. and mnfrs.

Abol Limited, 9, Beltring, Paddock Wood, Kent.

## Use the Chase Continuous Cloche in Summer

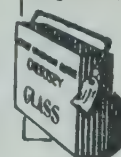


It will bring you fine and rapid results from late sowings—Dwarf Peas and French Beans for instance—long after ordinary crops are over, and ensures tender and rapid growth of all salads throughout the summer.

For General Use send for this case of "A" pattern Cloches. Each Cloche 7ins. high. Case contains 12 Cloches, covering 14 feet .. 18/-

For Larger Plants order "B" Cloches, 9ins. high. Set of 15, enough to cover 22 1/2 feet .. 35/-

Carriage Paid Home. (Scotland 2d. in 1/- extra.)



## To prevent scorching

in very hot weather, use it whitewashed over all seeds and seedlings. It preserves moisture and makes two waterings suffice where ordinarily three would be needed; and watering becomes easy and quick because no rose is needed and the cloche need not be removed.

Write now for FREE BOOKLET No. 7 which contains a mine of other useful information about the use of the Cloche.

Chase Continuous Cloche A Trap to catch the Sunbeams

Dept. 7, Chertsey, Surrey







## Don't Waste Your GARDEN RUBBISH!

### THE ADCO PROCESS (Patented in the United Kingdom and Abroad) WILL TURN IT INTO SYNTHETIC FARMYARD MANURE

ADCO is your garden's "Crop Insurance Policy." It maintains soil fertility at a "low premium" by guaranteeing a supply of organic fertiliser.

As refuse accumulates treat it with

#### ADCO ACCELERATOR

if at least half consists of soft green materials such as lawn cuttings; cabbage leaves or green weeds; but when dead leaves, vegetable stalks, herbaceous border cuttings, prunings, straw and straw packing, form the bulk of the heap, use **Standard ADCO**.

If your dealer does not stock ADCO write direct to us, mentioning his name and nearest Goods Station.

1 cwt. of ADCO makes from two to three tons of manure according to the class of rubbish treated.  
ADCO Accelerator .. 28 lb. 4/6, 56 lb. 8/-. 1 cwt. 15/-  
Standard ADCO .. 28 lb. 6/- 56 lb. 11/6 1 cwt. 10/-  
Carriage paid to nearest station. Cash with order.

ADCO, Ltd.



40, HARPENDEN.

Please mention THE GARDEN when writing.



Please mention THE GARDEN when writing.

## ACME WEED KILLER AND LAWN SAND

**Weed Killer.**—Tin to make 25gals., 3/-; for 50gals., 6/-; Postage 9d. on each; for 150 galls., 15/- carriage paid.

**Lawn Sand** for destroying weeds and moss.—28lbs., 7/-; 56lbs., 13/-; carriage paid on 1cwt., 25/- Fertilizes the grass.

Acme Chemical Co., Ltd., Tonbridge, Kent

Please mention THE GARDEN when writing.



**KILLS WEEDS.**  
Fertilizes the Grass.

**THE LAWN IMPROVER**  
with 30 years reputation to uphold. Full particulars from  
**GARDEN SUPPLIES, LTD.,**  
Cranmer Street . . . Liverpool.

## HIGH GRADE FERTILISERS FOR QUALITY AND ABUNDANCE.

**No. 1. SEMI-ORGANIC—PERFECT GENERAL PLANT FOOD.** Both Stimulating and Lasting.

Amm. 4.5 Phos. 22.5 Sul./Potash 5.6 7 lbs. 1/10 14 lbs. 3/3 28 lbs. 6/- 56 lbs. 11/- 1 cwt. 20/-

**No. 2. ORGANIC PROMOTING HUMUS.**

Best Substitute for Stable Manure, Excellent Plant Food, Lasting, Gives Good Heart to Soil.

Amm. 5.5 Phos. 18.2 Sul./Potash 4.8 7 lbs. 2/- 14 lbs. 3/6 28 lbs. 6/6 56 lbs. 12/- 1 cwt. 22/-

**No. 13. 56 lbs. 9/- SPECIAL ORGANIC LAWN.** 1 cwt. 16/-  
Promotes very fibrous turf and thick mat fine grasses.

Cash with order. Carriage Paid U.K.

**H. P. TRIPP, Orchard Works, VIEWSLEY, MIDDX.**

"TRIPLE"  
BRAND

Please mention THE GARDEN when writing.

## THE PATTISSON HORSE BOOTS

SIMPLEST  
STRONGEST  
MOST ECONOMICAL

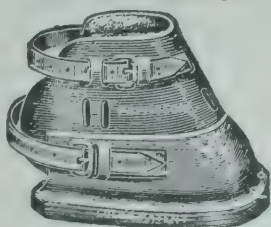


Fig. 2—Welted Pattern.

Illustrated Price Lists  
from the Makers:

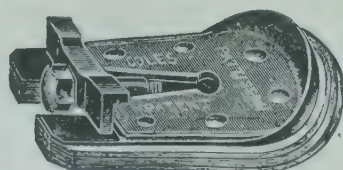


Fig. 1—For Shod Horses.

Best English Leather or Rubber Soles.

Used for many years in the Royal and in thousands of the Principal Gardens.

Silver Medals:—Royal Horticultural Society, 1904 and 1914  
Royal International Horticultural Exhibition, 1912.

HUNDREDS OF TESTIMONIALS.

ONCE TRIED  
ALWAYS USED

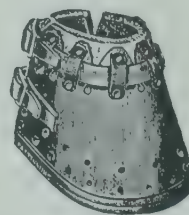


Fig. 2—No Welt Pattern

**H. PATTISSON & CO., Streatham, LONDON, S.W.16**

Please mention THE GARDEN when writing.



By Appointment.

## RANSOMES' LAWN MOWERS

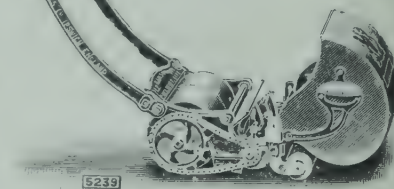
"The Best in the World."

HAND LAWN  
MOWERS OF  
ALL TYPES

"Automaton  
Minor."

The Best  
Light Roller  
Machines.

Gear or  
Chain Drive  
as preferred.



ALSO

MOTOR, HORSE, PONY  
AND  
DONKEY MOWERS.

PROMPT DELIVERY.

Write for List No. 111 to

**RANSOMES, SIMS & JEFFERIES LTD**

ORWELL WORKS, IPSWICH.

Sold by all Ironmongers and Seedsmen.

## SOIL PESTS DESTROYED

by "ALPHOL"  
Sample 14 lb., 3/6 carr. paid

Write for particulars of this and other reliable Garden  
Helps, Lawn Improvers, "Veribest" Seeds, etc., to

Garden Supplies, Ltd., Cranmer St., Liverpool

## "NIQUAS" THE INSECTICIDE.

(Non-poisonous.)

For destroying Greenfly, Aphis and Caterpillars  
etc., on all plants and trees.

30 years' reputation

Many hundreds of Testimonials received.

Equal to any, if not better, and cheaper,  
so why not use it and save money?

1/2-pt. 1 pt. 1 qt. 1/2-gall. 1 gall. 2 gall. 5 gall. 10 g.  
1/- 1/6 2/6 4/- 7/6 15/- 25/- 45/-

**CORRY'S CONCENTRATED QUASSIA EXTRACT**

1/2-pt. 1 pt. 1 qt. 1/2-gall. 1 gall. 2 gall. 5 gall. 10 g.  
9d. 1/3 2/- 3/6 6/6 12/6 23/- 42/-

THE ORIGINAL AND LEADING FUMIGANT



HUNDREDS OF TOMATO CROPS ENTIRELY SAVED  
No alterations needed since first introduced.  
Be satisfied with the best. Beware of imitation

Commended by the Royal Horticultural Society.

Cubic ft. 1,000 2,000 4,000 8,000 16,000 32,000 64,000  
10d. 13 2- 36 6- 106 19

Also in 2, 5 and 10 gall. drums.

Sold by Nurserymen, Seedsmen and Florists.

**CORRY & CO., Shad Thames, London, S.E.**

Please mention THE GARDEN when writing.



**Roses.**—Gold medal: To Hicks, E. J. Silver cups: To Allen, A. J. and Co. Silver gilt flora medal: To Cutbush and Son, Limited. Silver-gilt Banksian medal: To Cant and Sons, B. R. Silver flora medal: To Cant and Co., F.; Paul and Son, Wm. Chaplin). Silver Banksian medals: To Pemberton, J. H.; Prince, George.

**Formal Gardens, etc.**—Gold medal: To Wallace, R. and Co.; Carter and Co., J. Silver cups: To MacDonald, J.; Vernon Bros.; Winder, R. Silver-gilt flora medal: To Bakers, Limited; Cuthbert, R. and G.; Dixon, Ernest. Silver flora medals: To Wood and Son, Wm.; Cheal and Sons, Limited; Gaze and Son, Limited, W. H.; Johnstone Garden Contractors, Limited; Maxwell and Beale. Silver Banksian medals: To Horsecombe Quarries; Klinkert, J.

**Tulips.**—Gold medal: To Barr and Sons. Silver cups: To Dobbie and Co., Limited. Silver gilt flora medals: To Watts, W. A.; Longford, H. G. Silver-gilt Banksian medal: To Bath, Limited, R. H. Silver flora medals: To Pearson and Sons; Maytham Gardens. Silver Banksian medal: To Paul, E., and Co.

**Carnations.**—Gold medal and congratulations: To Engelmann, C., Limited. Gold medal: To Allwood Bros. Silver-gilt Banksian medal: To Low and Co., Stuart; Douglas, James. Silver flora medal and Allwood Cup: To Cain, Sir W. E., Bt. Executors of the late). Silver Banksian medal: To Luxford and Co., Keith.

**Fruit and Vegetables.**—Gold medal: To Vard, Major the Hon. Sir John (gardener, C. Beckett); Gibbs, Hon. Vicary (gardener, C. Beckett). Silver cups: To Bunyard and Co., Limited; Laxton Bros. Silver Hogg medal: To Rivers and Son, Limited. Silver Knightian medal: To Sutton and Sons. Bronze Hogg medal: To Vickers, V. C. gardener, W. Watkins).

**Rock Gardens.**—Gold medal: To Whitelegg, G. G. Silver cups: To Brook, H.; Latham and Son. Silver-gilt flora medal: To Elliott, Limited, Clarence. Silver flora medal: To Cutbush and Son, Limited. Silver Banksian medal: To Hodsons, Limited; Jones and Ingwersen, Gavin.

**Orchids.—Amateur Exhibits.**—Gold medal: To Colman, Sir J., Bt. (gardener, J. Collier). Silver cup: To Pitt, H. T., Esq. gardener, F. W. Thurgood). Silver-gilt Lindley medal: To Burrage, A. C., Esq.

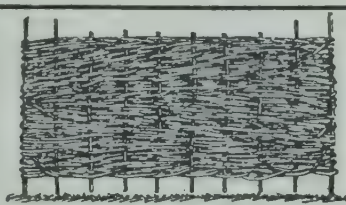
**Orchids.—Trade Exhibits.**—Gold medal and congratulations: To Charlesworth and Co. Silver cups: To Cowan and Co.; Low and Co., Stuart. Silver-gilt flora medals: To Cypher and Sons, J.; Mansell and Hatcher. Silver-gilt Banksian medal: To Flory and Black. Silver flora medals: To Dixon, H.; Sanders,

**Sweet Peas, etc.**—Gold medal and congratulations: To Dobbie and Son, Limited. Silver-gilt Banksian medals: To Dickson and Sons, Limited, Alex.; Smith, S. Silver flora medal: To Thompson, Miss S. Silver Banksian medal: To Bolton and Son, R.

**Alpine Plants, etc.**—Gold medal and congratulations: To Aberconway, Lady and the Hon. H. D. MacLaren. Silver cups: To Oliver and Hunter. Silver-gilt flora medals: To Hemsley, H.; Rogers and Son, Limited, W. H.; Jones and Ingwersen, Gavin; Tucker and Sons, R.; Elliott, Limited, C.; Macwatt, Dr. J. Silver-gilt Banksian medals: To Bakers, Limited; Bowell and Skarratt; Prichard and Sons, M.; Carter Page and Co., Limited; Maxwell and Beale; Prichard and Co.; Scaplehorn, E.; Walters, W. H. Silver flora medals: To Backhouse Nurseries (York), Limited; Cheal and Sons, J.; Aldersey Horticultural College; Central Garden Supplies; Sheppards; Skelton and Kirby; Rogers, R. V. Silver Banksian medals: To Crow, Esq., G. H. (gardener, A. Tingley); Reuthe, G.; Hopkinson, Miss K. Bronze flora medal: To Dixon, E.

**Shrubs.**—Gold medal: To Wallace, R. W., and Co. Silver cups: To Cuthbert, R., and Co.; Reuthe, G.; Koster and Sons, M.; Hillier and Sons. Silver-gilt flora medal: To Waterer, Anthony (Executors of the late); Waterer, Sons and Crisp, Limited, J. Donard Nursery Co.; Notcutt, C. R.; Yokohama Nursery Co., Limited; Charlton and Sons, A.; Fromow and Sons, W.; Russell, Limited, L. R.; Jackman and Son, G. Silver-gilt Banksian Medals: To Cheal and Sons, J.; Cutbush and Son, Wm.; Stuart Low and Co.; Gill and Son, R. Silver flora medals: To Endtz, N. J., and Co.; Lewis, T.; Slocock, W. C.; Turner, C.; Watson and Sons, Limited, W.; Green, Limited, R. Silver Banksian medal: To Harrods, Limited. Bronze flora medal: To Whitelegg, G. G.

**Herbaceous.**—Gold medals: To Blackmore and Langdon; Bunyard and Co., G.; Carter, J., and Co.; Russell, Limited, L. R.; Sutton and Sons; Jones, H. J. Silver cups: Perry, Amos; Webb and Sons (Stourbridge); Brandt, Esq., H. B. (gardener, H. Cook). Silver-gilt flora medals: To Wood, F. G.; Cutbush and Son; Waterer, Sons and Crisp, J. Silver-gilt Banksian medals: To Ellison, H. N.; Ladhams, Limited, B.; Peed and Son, J.; Prichard and Sons, M.; Scaplehorn, E.; Storrie and Storrie; Watkins and Simpson; Artindale and Son, Wm.; Bees, Limited; Blackmore and Langdon; Carter Page and Co., Limited; Chalk Hill Nurseries; Dawkins, A.; de Goede Bros.; Orpington Nurseries Co.; Toogood and Sons, Limited. Silver flora medal: To Clarke, H.; Hewitt and Co., Limited; Jarman and Co.; Maytham Gardens; Miller, G. A.; Yandell, William; Smail and Co.; Wells, Junr., W. Silver Banksian medals: To Carlile, T.; Gibson and Co., G.; Godfrey and Son; Maytham Gardens; Reamsbottom and Co.; Rich and Co. Bronze flora medal: To Case, R. J.; Cheal and Sons, J.



## WATTLE HURDLES

6 feet long

24, 30, 36, 42, 48, 54, 60, 72 inches high

PLEASE STATE QUANTITY

ERNEST R. SMITH & CO., Haslemere, Surrey

## Southampton Royal Horticultural Society ROSE SHOW

Hampshire County Cricket Ground  
JUNE 23rd and 24th

Schedules on application to—

MATTHEW W. BEFR (Hon. Sec.),

"Eperquerie," Bassett, Southampton



### ROCKRAVEN GARDEN STONE

COMPANY SUPPLY POROUS LIME-  
STONE ROCKS FOR ALPINE SUBJECTS:  
WEATHER-WORN BY THE STORMS  
OF CENTURIES INTO DELIGHTFUL  
POCKETS, LEDGES AND FISSURES.  
|| VARIED SHAPES AND SIZES ||

APPLY: SECRETARY  
LINTON-IN-CRAVEN, SKIPTON, YORKS

## CRISP'S PERENNIAL BROCCOLI

Lasts many years and gives a crop  
each year of from 5 to 12 good heads.

SOW SEED NOW, 1/- per Packet; PLANTS,  
1/- per doz., 5/- per 100. Ready now.

H. C. GROOM & CO., 5, Guilden Sutton, CHESTER

# PRIZE Vegetables

Vegetables grown with the  
help of Nitrate of Soda take  
the prizes at the shows.  
This means that it brings rapid  
growth, and imparts quality,  
crispness, tenderness, etc.

Write for pamphlets, entitled, "Successful  
Gardens for every Amateur," "The Man-  
aging of Orchards and Fruit Trees,"  
supplied gratis and post free by THE  
CHILEAN NITRATE COMMITTEE,  
Friars House, New Broad Street, London,  
E.C. 2.

## Nitrate of Soda



Closed

## WILLMOTT Rival Plant Stake

(Patented No. 183779).

As used in Royal Botanic Gardens.  
For all plants. WILL NOT ROT,  
WEAR OUT OR BREAK.

Sample of eight sizes,  
2/- car. pd. United Kingdom.  
4/- Overseas.

H. J. GREENWOOD, F.R.H.S., Proprietor,  
BRACKNELL, Berks.



Open

## Comfort in the Garden!



### SUPERIOR WOVEN HAMMOCKS

IN ATTRACTIVE STRIPED COLOURINGS.  
FULL SIZE. ENGLISH MANUFACTURE.

No. 1.—With Pillow, but no Valance - - - 17/6  
No. 2.—With Pillow and Valance - - - 21/-  
No. 3.—More open texture. Without Pillow and  
Valance. Plain Colours: Orange, Green, Scarlet 9/6

**SUN AWNING.** Superior Striped  
Canvas, complete with wall bracket,  
etc., as illustrated.  
6 ft. deep x 6 ft. long - - 23/6  
6 ft. deep x 9 ft. long - - 31/6  
6 ft. deep x 12 ft. long - - 41/6  
Green rot-proof canvas, 2/6 extra.



**GARDEN SHELTER.** 6 ft. x  
3 ft. 6 ins. Folding, Port-  
able. Best Striped Canvas  
Ditto, with extension as  
shown - - - 39/6  
Green rot-proof canvas - 36/6  
Ditto, with extension - 45/-



**MAHARAJAH FOLDING CHAIR.**  
Compact and Comfortable.

Striped Canvas - - - 12/6  
Green Rot-proof ditto. - 14/-  
Heavy Jazz Stripes - 15/-

### PINOLEUM SUN BLINDS.

Suitable for Inside and Outside. Shade  
yet Ventilation. Complete with top rail  
and fitted with catch to hold blind in  
any position. Painted Green. Any size  
made to order. Stocked as follows:—

Width	Length	Price	Width	Length	Price
36"	72"	7/9	48"	84"	13/6
42"	84"	10/-	54"	96"	15/6
46"	84"	12/3	60"	96"	18/6

All above are Carriage Paid, England and Wales.

**SMITH & ELLIS, Ltd. (Dept. 13),**  
11, Little Britain, Aldersgate Street, London, E.C.1.



# SIMPLE GARDENING

## ROSES UNDER GLASS AND IN POTS.

**R**OSES are grown very extensively under glass, both planted out and in pots, by nurserymen and growers for cut blooms and as small specimens in pots for market. Amateur cultivators also make efforts to grow the plants in this way—some very successfully, others with but partial success. Those who are just beginning to grow roses thus, and so lengthen the flowering period, may make mistakes. Usually, the plants are well cared for while they are making the new wood—tender shoots containing the flower buds—and during the actual flowering stage; but afterwards are often neglected. Of course, those plants growing in borders are permanent and must remain under glass throughout the summer months, but the pot-grown ones should be placed outside directly the flowers have faded. If retained under glass there will be a second crop of flowers; but the cultivator is not justified in keeping them in the house for this, except in seasons when blooms are needed for some special purpose. Abundance of air should be admitted to the permanent rose plants; any dying shoots and those very young and mildewed should be cut out, the branches well shaken to get rid of old leaves, then syringe thoroughly with "Abol" and, afterwards, with clean water. Keep down aphides—fumigate for this purpose—and so reap a good early autumn crop of clean flowers. By judicious pruning there will be a few blooms available nearly all through the summer. The pot plants should also be cleaned; then plunge the pots to their rims in ashes, leaves or soil on a cool base. Re-pot the plants early in July.

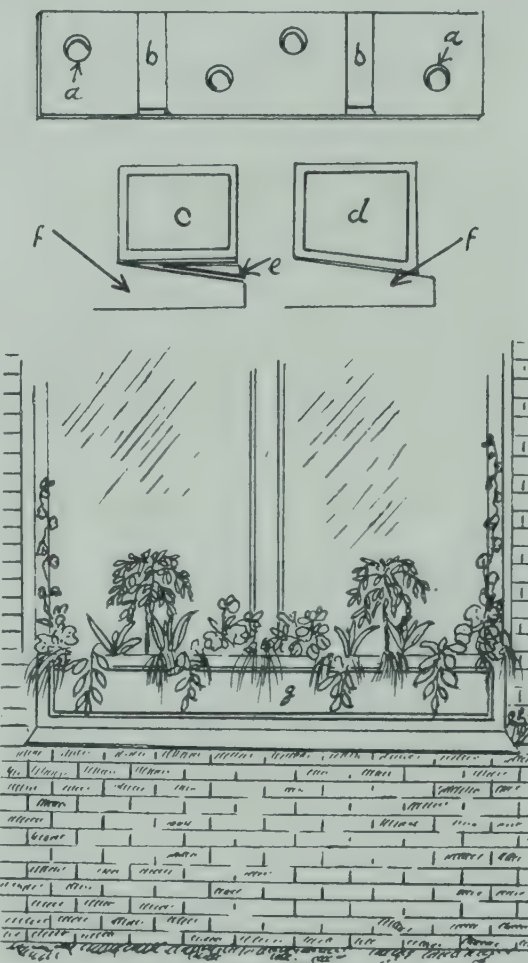
## THINNING OUT SEEDLINGS.

This is work that takes up much time, but it is a very necessary one if the slugs have not been too busy. They generally take the best seedlings or all of them. I thoroughly enjoy thinning-out healthy young plants and endeavour to begin the work at an early stage of their growth and strongly advise readers of *THE GARDEN* to do so. When the seedlings are small they possess only a few roots and so the majority can be drawn out without interfering with the roots of those left in the rows. Suppose we take, for example, a bed of carrots; if the thinning has been unduly delayed, the plants retained are much loosened in the soil, the carrot fly can easily do its worst, as we often see when the matured roots are lifted and their skins marred. Always look out for the isolated seedlings—those growing, perhaps, in, from a cluster of seedlings—and retain the isolated specimen in preference to one in the bunch. The same remark applies to turnips, beet, onions and annuals. Place a finger on the soil near the one to be left in the ground and gently press it to prevent that seedling being disturbed. When the work of thinning is finished, we possess the right number of seedlings in each row, and so we must take care of them and protect

them from slugs. A few old ashes washed by rains, should be scattered round our most cherished annuals, as slugs do not crawl freely over sharp ashes. Water through a fine-rosed watering can to settle the soil round the seedlings left. The evening is the best time to do the work of thinning-out.

## WINDOW BOXES.

These, well and tastefully filled, make a beautiful house still more beautiful, and even commonplace ones attractive. In certain positions the window boxes are sheltered, but, generally, they are exposed to cold and sometimes strong winds.—It is a mistake to place plants in a window box and the latter in the window



forthwith, except in certain cases and at mid-summer time. The best way is to get the plants established in the boxes during the latter part of May and then place the boxes in the windows about June 10th. Of course, I am referring to outside boxes. The latter, while the plants are being established in them, should be placed in frames or in cosy corners, where temporary shelter may be afforded during the night time and on very cold days. The old combination of scarlet zonal pelargoniums, white marguerite, daisies and blue lobelia is very satisfactory in many cases. But annuals may be used to great effect, and ferns and fuchsias, also begonias in boxes, placed in windows receiving very little sunshine. For hot positions, petunias, antirrhinums and nasturtiums, with *Gazania splendens*, are most satisfactory. Some holes, *a, a*, should be made in the bottom of each box, and cross pieces, *b, b*, attached to

prevent warping. The window stones have a sloping surface, and if boxes are made square in shape, *c*, they should have wedges, *e*, under them. If the boxes are made to fit the stones, as shown at *d*, wedges are not required. Sections of stones shown at *f, f*, and the box in position at *g*.

## TREATMENT OF SEEDLINGS OF PERENNIALS.

The treatment during their young stages of growth has much to do with the later successful flowering of the full-grown plants. With a few exceptions; hardy border perennials, to which I am now referring, grow freely enough, and so they are allowed to exist instead of being cared-for as valuable plants, which they really are. There is a vast difference between herbaceous borders properly attended to and those that are neglected. The amateur should select some nice open border in the garden and devote a few square yards to the seedlings and quite young stock. When the time comes to re-arrange the herbaceous border or to plant the new one, he will be glad that he did look after the youngsters. Take, for instance, the seedlings of the Michaelmas daisies; they are very interesting, and one never can tell beforehand how many gems one will cull from the collection. If the soil is poor and shallow, dig in some fresh loam, leaf-soil and rotted manure. Allow the soil to settle for a week or ten days before the young subjects are planted in neat rows and duly labelled. It is better to plant when the soil is dry than when it is wet and sticky; but a good watering should be given directly the work of planting is finished. Make the soil firm around the seedlings with the fingers while engaged in planting. Some kinds require shading a little, and, as the quarter is an open one, the necessary shading can be afforded by sticking in a few evergreen branches. Slugs do a lot of damage, especially to delphiniums, *Lobelia cardinalis*, *lychnis*, *pyrethrums* and *dianthus*. Fine, washed cinders are effective, also lime and soot judiciously used.

## ANNUALS FOR LATE FLOWERING.

Half-hardy and hardy annuals are eagerly raised early in the season with a view to having an early display of flowers. If the slugs and other untoward circumstances permit, the display is usually forthcoming; but in many instances it is short-lived, and then seared plants or bare patches result. The usual early plants are now in need of thinning-out, so readers should sow more seeds now of the following, chiefly stocks, night-scented stock, *clarkia elegans*, *godetias*, Shirley and double-flowered poppies, lupins, mallows, *mignonette*, *candytuft*, *marigold* (pot) and *dimorphotheca*. A good method of sowing the seeds is as follows: if the seeds are to be sown in beds of mixed flowers, make circular shallow drills with a pointed stick, sow the seeds, cover and label. **GEORGE GARNER.**



# THE GARDEN.

Sow Now to Bloom Next Spring.

## WEBB'S LOVELY WALLFLOWERS—

Fireball, fiery orange, 1/- packet. Kinver Favourite, rich blood red; Canary Bird, golden yellow; Eastern Queen, salmon shaded; Ruby Gem, ruby violet; Vulcan, deep velvety crimson; Universal, single mixed; Double Mixed; each 8d. and 1/- packet.—WEBB & SONS, LTD., The King's Seedsman, Stourbridge.

## WATERER'S GOLD MEDAL RHODODENDRONS AND AZALEAS, Rare Hardy Shrubs, Alpine and Perennial Plants, Vegetable and Flower Seeds, Outdoor Chrysanthemums, Bedding Plants and Dahlias. Catalogues Free.—JOHN WATERER, SONS AND CRISP, LIMITED, Twyford (Berks.), Bagshot (Surrey), and London.

## WAKELEY'S PATENTED HOP MANURE.

The original and only substitute for Stable Manure. See advert. on back cover.

## WM. DUNCAN TUCKER & SONS, LTD.,

Lawrence Road, South Tottenham, N.15.—Conservatories, Winter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

## BIRDS' BATHS, GARDEN VASES, SUN-DIALS, NESTING BOXES. Catalogue (No. 4) free.—MOORTON, 60, Buckingham Palace Road, S.W.

## TANNED GARDEN NETTING, small mesh,

5yds. by 1yd., 2s.; 25yds. by 2yds., 4s.; 40yds. by 1yd., 3s. 3d.; 40yds. by 2yds., 6s. 6d.; 40yds. by 3yds., 9s. 9d.; carriage paid. Compare our netting with others. Lists now ready.—GALLOP, Net Manufacturer, Hastings. Telephone: 352.

## WELLS' CATALOGUE OF CHRYSANTHEMUMS now ready, and will be sent post free on application.—W. WELLS & Co., Mersham, Surrey.

## WM. ARTINDALE & SON, Nether Green

Nursery, Sheffield, will be pleased to send their Catalogues of Hardy Plants, Seeds and Gladioli on request.

## TENNIS BOUNDARY NETTING, 50 yds. x

10yds., 20/- Iron Standards, 9 ft., 3/- each. Tennis Nets from 10/- Sports Lists now ready.—GALLOP, Net Manufacturer, Hastings

## PEA GUARDS.—Small Mesh, 3ft. long, 4/9

doz., with ends, 2 doz. carriage paid. Enquire prices of Trellis, Arches, Pea Netting, Barrows, and all garden requisites.

## TENNIS BOUNDARY NETTING.—Lines top

and bottom, 25yds. by 2yds., 16/3; 3yds., 18/3; 4yds., 25/3. Carriage paid; approval. Standards for fixing to, also playing nets, poles and all requisites supplied.

## FEED THE BIRDS.—Rotless Tanned

NETTING. Small mesh. As supplied by us to the Royal Gardens. In two qualities. 50yds. by 1yd., 4/-, 6/9; 2yds., 13/6; 3yds., 12/-, 20/3; 4yds., 16/-, 27/-; 25yds. by 8yds., 27/- Any size supplied. Carriage paid; approval. Cheaper qualities, 3, 6 50 yds., measured mesh closed.

## ALVANISED WIRE NETTING.—Superior

quality, 50yd. rolls.  

	1ft.	1ft. 6in.	2ft.	2ft. 6in.	3ft.	4ft.	5ft.	6ft.
1/2 in.	2/10	4/1	5/1	—	7/1	9/5	11/9	14/2
3/4 in.	3/11	5/8	7/2	8/6	9/8	13/-	16/3	19/6
1 in.	4/7	6/6	8/3	—	11/6	15/3	19/1	22/11
1 1/4 in.	6/5	9/2	11/8	14/3	16/7	22/2	27/9	33/3

 by 1 1/2 ins., 13/2.

## LAWN MOWERS, 5 Riveted Blades, high

steel, brass bushings, close cutting, highly finished, unequalled value, 3in., 25/6; 10in., 27/-; 12in., 29/6; 14in., 35/-. Garden rollers from 37/6.

## PEA NETTING.—Barked, Extra Strong and

usable, only 2 1/2d. square yard. Standards for fixing to.

## ECLIPSE SPRAYER.—Simplest and Most

efficient for Insecticides, Limewashing, Disinfectants, Creosoting, &c. 31/- Carriage paid.—E. B. HAWTHORN, LIMITED, Dept. Shrewsbury.

## BARR'S SEEDS FOR JUNE SOWING.—

For VEGETABLE AND FLOWER GARDEN, ROCK GARDEN and GREENHOUSE. Finest Selected Strains and Tested Growth. Special Lists Free.—BARR & SONS, 11, 12, and 13, King Street, Covent Garden, London, W.C.2.

## THE DOUGLAS CLOVES AND BORDER

CARNATIONS; glorious scent, stiff stems, and continuous flowering. The new crop of seed is now ready to sow. 2s. 6d and 5s. per packet. Plant catalogue now ready.—J. DOUGLAS (The Premier House for Carnations), Gt. Bookham.

## IRON AND WIRE FENCING FOR GAR-

DENS.—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—BOULTON AND PAUL, LIMITED, Norwich.

## SEWAGE DISPOSAL FOR COUNTRY

HOUSES.—No emptying of cesspools; a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—WILLIAM BEATTIE, 8, Lower Grosvenor Place, Westminster.

## JAMES BACKHOUSE, F.L.S., F.R.H.S., for

many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to CAER FEGLA, Arthog, North Wales.

## LAXTON'S STRAWBERRIES AND FRUIT

TREES.—Our Novelty List for 1925 is now issued, and contains new Apples, Raspberries, Currants, Strawberries, etc. All Garden Lovers should have this. Post Free.—LAXTON BROTHERS, Nurseries, Bedford.

## GARDEN NETS.—Best tanned, small mesh,

25yds. by 1yd., 2/-; 25yds. by 2yds., 4/-; 25yds. by 3yds., 6/-; 25yds. by 4yds., 8/- Carr. Paid. Satisfaction guaranteed. Tennis nets from 10/-. Special nets for tennis boundary. Pea training nets. Lists and samples free.—G. JARRETT, Net-maker, Rye.

## VANCOUVER ISLAND and Pacific Coast

rare ornamental alpine and lowland plants, bulbs, etc. Only those difficult or impossible to obtain in England are offered. Plants well packed and despatched at the right time of year arrive in good condition. Write for list.—J. BENNETT, Lake Hill P.O., Victoria, B.C., Canada.

## CRAZY PAVING.—Dwarf Walling, Rockery

Stone direct from quarries. Cheapest and most artistic on market.—CLAYTON AND HAMMOND, LIMITED, 53, Baker Street, W.1.

## SUNDIALS, BIRD BATHS, VASES.—In

Imperishable Reconstructed Stone. Write for catalogue G2.—CLAYTON AND HAMMOND, LIMITED, 53, Baker Street, W.1.

## LOOK! TANNED GARDEN NETS.—All

orders despatched same day. 25 yards by 1 yard, 2/-; 25 by 2, 4/-; 25 by 3, 6/- Odd netting for bushes, 6 lbs. for 2/6. All carriage paid. Any sizes supplied. Also Tennis Boundary Nets.—MOORE & Co., Net Works, Rye.

## GENTIANA SINO-ORNATA — Charming

Cambridge blue, blooming Autumn, 10/- per doz.; 6/- for six.—MORRIS, Formakin, Bishopton, Renfrewshire.

## CHEAP ROCK PLANTS TO CLEAR.—Viola

cornuta, yellow and mauve, 6d.; Sisyrinchium angustifolium, 4d.; Campanula pusilla alba, 6d.; Winter Heliotrope, 2d.; Schizostylis coccinea, 4d. Post 6d., or free over 5/- order.—STRICKLAND, Barnfield, Charing, Kent.

## PULLETS, pure breeds, laying, 7/6 each,

90/- doz.; Chickens, 1,000, great bargain, month old White or Brown Leghorns, Sussex month old, 2/- each, 24/- doz.; two month, 3/- each, 36/- doz.; three month, 4/- each, 48/- doz.; 500 Crossbreeds, same ages, 18/-, 24/-, 38/- doz., carriage paid livedelivery. List free.—CONTINENTAL FARM, Stratford, Essex.

## SUTTON'S WALLFLOWERS.

The cultivation of the Wallflower was revolutionised when we introduced the wonderful Orange-Scarlet varieties, and we strongly recommend flower lovers to try the following:—

SUTTON'S FIRE KING (orange-scarlet).  
 SUTTON'S ORANGE BEDDER (vivid orange).  
 SUTTON'S CLOTH OF GOLD.  
 SUTTON'S GIANT VULCAN (a fine crimson variety).  
 Each Per Packet, 2/6 and 1/6.  
 SUTTON AND SONS, THE KING'S SEEDSMEN, READING.

## DOBBIE'S PLANT CATALOGUE now ready.

Free to all readers. Please mention THE GARDEN when writing.—DOBBIE & Co., LTD., Edinburgh.

## CHEAP GOVERNMENT WIRE!!! Great

for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—GREEN'S GOVERNMENT STORES, 69, Albert Street, Lytham.

## HERRING NETS for protecting seeds, fruit,

etc., approximately 100ft. by 30ft., 11/6 each. Other nets, better quality, 21/- each. Carriage paid. Cash with order. WM. G. GRIGOR, Earl Street, Port Gordon, Banffshire.

## GARDEN NETTING.—Best: selected, small

mesh, tanned, 25 by 4 yds., 8/-, or 8 yds., 16/-. Carriage paid. Tennis Nets and Standards. List free.—STRAWBERRY NETTING Co., 5, Suffolk Terrace, Lowestoft.

## FULL OF WISE SAWS AND MODERN

instances our catalogue offers all that is brightest and best for the present day garden. The choice plant at Sixpence a time may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—FELDEN AND CROUCH, 2, Fairseat Nurseries, Wrotham, Kent.

## NEW ZEALAND PLANTS for Seaside

Gardens.—Pittosporum nigrescens for hedges, pot grown plants for planting, now 18/- per doz. Olearia Macrodonia, 1 1/2 ft., 12/- doz., splendid for hedges. Olearia Haasti, 1 ft., 12/- per doz. Brachyglottis repanda, 2/6 and 3/6 each. Clematis indivisa, 2/6 each. Ozothamnus, 2/6 each. Muhlenbeckia complexa, 1/6 each.—TRESEDER & Co., The Nurseries, Truro.

## WOULD anyone having spare copies of

"Farrer's Works" please send particulars and prices to J. W. CLAYTON, Bryn Derw, Plan Conway.

## PRIMULA, ALPINE AND PERENNIAL,

Seeds, from large (1,500) collection, sold cheap. List free.—REV. J. F. ANDERSON, Glenn Hall, Leicester.

## IPSWICH RARE SEEDS. Catalogue de-

scribing nearly 3,000 kinds now ready. Free on application to THOMPSON & MORGAN, London Road, Ipswich.

## "LOOK!" STOUT NETS, for Tennis Court

Bordering, lined top and bottom, 30yds. long 2 yds. wide, 16/-; 30yds. by 3yds., 22/-; 30yds. by 4yds., 30/- Standards for same (wooden) 10ft. high, 3/- each. All carr. paid.—COUSSENS & Co., Tennis Net Works, Rye.

## GARDEN NETS, tanned, small mesh, for

Peas, Seeds, and Strawberry protection. 30yds. long, 2yds. wide, 4/6; 30yds. by 3yds., 7/-; 30yds. by 4yds., 9/-; 30yds. by 5yds., 11/6; 30yds. by 6yds., 14/- Carr. paid.—ALFRED ROBINSON, Garden Net Works, Rye.

## IMPROVE YOUR GARDEN by the use of

solid Oak Trellis Screens; they are ideal for growing creepers of all kinds and for securing privacy, at the same time adding an artistic feature that will last a lifetime (being pickled in preservative). No trouble to erect (being made in sections). Send for lists and get an estimate from W. T. REVITT, Railway Works, Olney.

## GREENHOUSE PAINTING AND GLAZING.

—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. —"Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7lb. tins., 4/- post free; 14lb. tins., 5/6, each, carriage extra, tins free.—Full particulars from W. CARSON & SONS, Grove Works, Battersea, S.W.11



**CARNATIONS** for Garden & Greenhouse**PERPETUAL FLOWERING  
(Greenhouse) Varieties**

We carry large stocks—rigidly selected—of all the best varieties. For immediate flower we offer fine plants in 6" pots in bud. Young stock, ex 34" pots, stopped and broken, to pot along, or plant, ready now.

All Collections are carr. and packing paid for cash

6 plants in variety	6" pots	ex 34" pots
12 " "	24/-	8/6
25 " "	45/-	16/-
	80/-	30/-

**ALLWOODII (Half Pink, half Carnation)**

New and delightful self colours have been introduced in the ever popular Allwoodii—the hardy plant which grows and flowers in every garden and window-box. The collections quoted below are exceptional value, and include many quite new and unique varieties.

6 plants in variety, 6/6 12 plants in variety, 12/-  
25 plants in variety, 22/6

**HARDY PERPETUAL BORDER CARNATIONS**

Will eventually supersede the old Border type, being hardier, freer flowering, carrying bolder and more sweetly perfumed flowers. A much wider range of colour is now obtainable, and the following collections are first-class value, embracing many of the later kinds.

All plants ex 34" pots—immediate delivery.

6 plants in variety, 15/- 12 plants in variety, 27/6  
CATALOGUE of all CARNATIONS POST FREE ON REQUEST but order the above collections at once for prompt delivery, and exceptional value.

*Allwood Bros*

The leading  
Carnation Raisers  
and Specialists  
in the World.

Dept. 4, Haywards Heath, Sussex.

**GOLD MEDAL  
FOR DAFFODILS**

**INTERNATIONAL SHOW HAARLEM  
1925**

**THE WELSH BULB FIELDS, ST. ASAPH**

**1925**

CATALOGUE of  
Perpetual-Flowering

**CARNATIONS**

If you are interested and would like a copy, post your name and full address to:

**C. ENGELMANN, Ltd.,  
SAFFRON WALDEN, Essex**

**FINE SMOOTH TURF**

**NO DAISIES OR  
COARSE GROWTHS**

**Eureka  
LAWN SAND**

*The Best Lawn Medicine*

**PRICES :**

2 lbs., 1/3; 7 lbs., 2/6; 14 lbs., 4/-; 28 lbs., 7/-;  
56 lbs., 13/-; 1 cwt., 25/-; 5 cwt., 112/6.

**SOLD BY AGENTS.**

If any difficulty in obtaining write the only makers:

**TOMLINSON & HAYWARD, LTD.,  
NEWLAND, LINCOLN.**

*Notes from Maidstone.***IRISES.**

Gold Medal, Chelsea, 1925  
Gold Medal, Chelsea, 1922  
Gold Medal, R.H.S., 1924  
Silver-Gilt Medal, Chelsea,  
1923.

Silver Cup, Chelsea, 1924

Looking back we find that we were receiving Awards for Iris so long ago as 1895, but the above are some of those recently made for our Famous Iris and give an idea of the high standard of our collection. However, a far better way of appreciating this is to visit our Nurseries, where the Iris may be seen in full bloom and the great variety and vigour of our plants will be their own recommendation.

We should be glad if intending visitors would advise us so that we can arrange for an Iris expert to be present. Our Catalogue containing all the best varieties will be sent post free.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.

# ATCO

## MOTOR MOWER

### —and Lawn Tennis

The ATCO Motor Mower represents the fastest and by far the most satisfactory means of keeping Tennis Courts in perfect condition. A number of courts can be mowed in the shortest possible time at a fractional fuel cost. The letter reproduced below is one of many received from delighted ATCO users:—

"Dear Sir,

"We have been using two of your ATCO Motor Mowers with satisfaction. The job has been well thought out, particularly regarding accessibility for adjustment and cleaning. Balance is also good. The Cultivator is a valuable accessory for tearing out the rough coarse grass and fining down a lawn."

The ATCO Motor Mower will prove just as satisfactory on your lawns. If you are interested in turf culture, send for our Booklets "Turf Needs" and "Notes of Praise" giving you full particulars of the ATCO. If you wish to see the machine at work, we will gladly arrange a free demonstration on your own grass without obligation on your part.

Equip your ATCO Motor Mower with the ATCO Turf Cultivator. It aerates grass roots and removes moss and weeds.

16 inch  
Model

£50

22 in. Model

..

£75

Personally

30 in. Model

..

£95

Delivered.

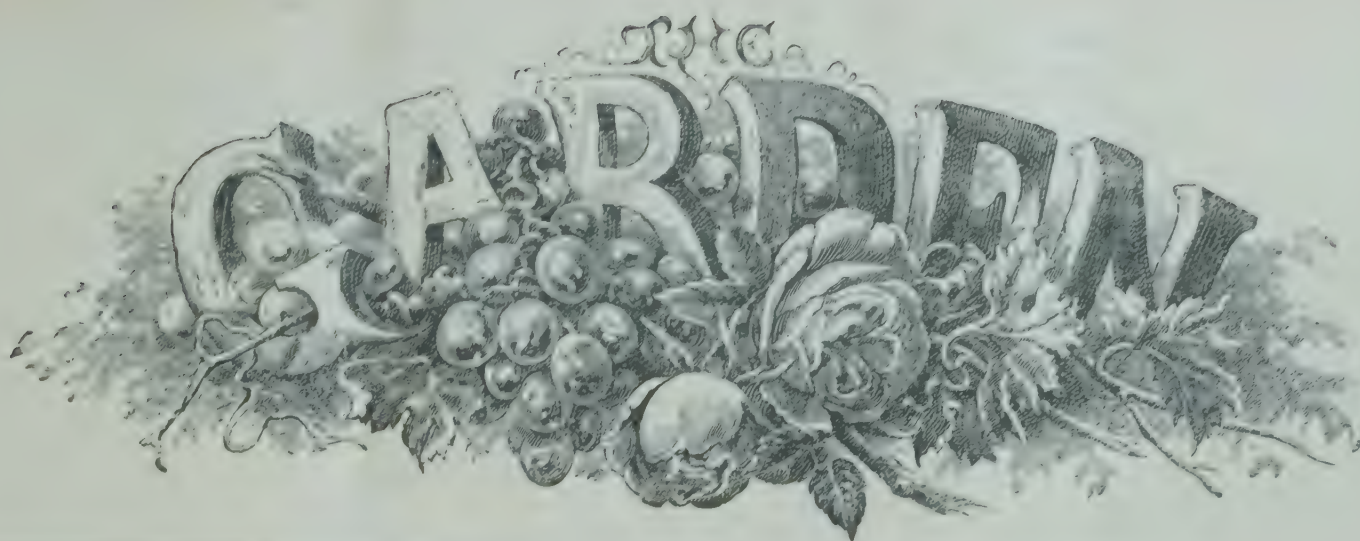
5 per cent. for cash in 7 days.

EVERY MACHINE GUARANTEED FOR 12 MONTHS.

**CHAS. H. PUGH, Limited**  
Whitworth Works, 31, Tilton Rd., BIRMINGHAM







VOL. LXXXIX.—No. 2794.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d.

Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2.

Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.

Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.

Entered as Second-class Matter at the New York, N.Y., Post Office.

JUNE 6, 1925

## GARDENERS: II—THE SPECIALIST

**S**PECIALIST gardeners appear in every course of life; some are born specialists, some are made specialists and some have specialisation thrust upon them. Many people laugh at the born specialist and strongly object to being forced to take an interest in seedlings or unflowered specimens of a plant they do not know; but the people who specialise in daffodils or rhododendrons are only the obvious specialists; there are hundreds of others working in the background to whom we owe most of the plants to be found in our gardens.

There are specialists who rarely enter a garden and yet have a great influence on modern gardens; there are the plant biologists and the plant pathologists and other members of the botanical fraternity. There are specialists who do nothing else but raise new sweet peas or new roses or some other garden flower; these sit in a seed farm or in a nursery and are only known by name to a chosen few. There are specialists who can work wonders with a cutting or a bud or a graft and who think nothing of making thousands of grafts in a month. Trade secrets, you may say about all of these. No, emphatically no. Tricks which can be learnt by anybody provided that he is prepared to go through the mill and spend years in learning how to do one job in two minutes, a job which would take an ordinary mortal an hour. These are the drones in the horticultural hive. They live and die unknown, but no one can deny that every garden owes a great debt to their labour. These are they who have specialisation thrust upon them. They must be specialists in order to make a living.

Made specialists are different. Either they garden or they work as ordinary gardeners. There is no necessity for them to specialise and yet long practice or nimble fingers or some little, and possibly easily acquired, knack has made them perfect in one particular thing. Climate or soil conditions may have a great deal to do with their special subject. A perfect soil for roses will usually end in making the gardener a specialist in roses. It makes him go beyond the actual needs of his job. He will read up the subject; he may try his own hand at making new varieties; at any rate, it will carry him beyond the knowledge possessed by the ordinary gardener.

The born specialist is unexplainable. A virus infects him; he has a craze for growing a certain genus or for cultivating a certain type of garden. So severe is this disease that one might say he is not a gardener at all. It is the collector's craze which may attack anyone who has a hobby for collecting anything, whether it be plants or stamps or policeman's batons. Often it is incurable, sometimes the attack slackens in its intensity, usually

from a surfeit of good things or from lack of space. I may as well be frank and say that I suffered from a severe bout of rhododendronitis, but, although I like them as well as ever, the intensity of my passion waned when I found that several thousand acres would be necessary to grow every rhododendron in the way I should like to see them—in mass formation of anything from twelve to a hundred plants of each of the seven hundred species, apart from hybrids. I have given up collecting rhododendrons. I now pick and choose those which I think I like or which I consider will grow well in my garden. Consequently, I have room for other plants and my outlook has widened considerably.

There must be a great deal of the gambler in the born specialist, for he is never so happy as with a new find. However doubtful the description of a species or however small the chances of a masterpiece in a batch of hybrids, he will tend them as carefully as his greatest treasures, though it may be years before they flower. Born specialists are nothing if not courageous.

Lest I be considered a renegade I will admit that I would specialise again to-morrow, if I could discover some good-looking genus whose members were limited to twelve or so in number with an added guarantee that not more than two new hybrids and two new species were to be introduced every year. It is the unknown that terrifies me and although I confess to being a collector, it is very much a case of once bitten, twice shy.

And yet our gardens have a great deal for which to thank the born collector. Who else would there be to test and report on new species and new varieties, particularly of trees and shrubs? The botanic gardens can never grow them all, the ordinary gardener has not the requisite keenness, and there is too much risk attached for the nurseryman to attempt it, even if he had the staff and the space. Somebody has to do it, else horticulture would languish, so even the born specialist has his uses.

E. H. M. C.

### AMONG OTHER ARTICLES IN OUR NEXT ISSUE WILL BE:

JUNE WORK AMONG THE CHRYSANTHEMUMS, by A. J. Macself.  
FRAGRANCE IN THE SUMMER GARDEN, by H. W. Canning-Wright.

ENEMIES OF THE STRAWBERRY, by M. L. Brooke.  
GARDENS OF HEALING—II, by Victoria Slade.



# HYDRANGEAS

THE great variety of colour to be found in the new introductions of *Hydrangea hortensis* have made this class of greenhouse plant extremely popular in gardens, and rightly so, considering the comparative ease with which they may be cultivated. The flowers last a long time, and hence their value for the decoration of the conservatory and greenhouse.

For house decoration they are also admirable, the flowers lasting considerably longer than many other flowering plants. Several nurserymen have of recent years made a speciality of hydrangeas, notably Mr. H. J. Jones of Lewisham. Magnificent groups have been exhibited from time to time at the Chelsea and other shows, which have impressed visitors, and especially gardeners, with the great advance in size of the flowers, the beauty of their colour, and variety. Some of them have received awards of merit from the R.H.S., testifying to their fine qualities.

Hydrangeas may be cultivated in various ways for different requirements. They may be grown with single stem, carrying a large head of bloom, in 48-size pots, or larger plants with several growths in 32 and 24-sized pots, up to specimen plants in 10in. and 12in. pots, according to requirements. Large specimens in tubs make a fine display during the summer months, when standing in conjunction with other plants on terrace walks, where they show to excellent advantage. For this purpose choose those of a strong, sturdy habit of growth.

Propagation may be effected by two methods—either by taking cuttings of the young side growths off the older plants in the spring, or by half-ripened growths during August and September. Personally, I prefer to propagate at both seasons, thereby ensuring a good stock of young plants. Where stock is plentiful, several cuttings may be rooted in each pot, and later again potted into a larger size, without division, thereby ensuring a larger flowering plant in the minimum space of time.

For autumn propagation, good strong shoots should be selected, preferably those which failed to flower during the summer months; in these shoots will be found a good plump terminal bud, which will, if all goes well, give a large head of flower in the following spring months.

The cuttings should be inserted singly in small pots—using fine light soil with a liberal amount of silver sand—well watered in, and placed in a warm close house till rooted, shading from strong sunshine. When the cuttings are rooted they must be at once inured to cooler treatment until they are eventually rested in a temperature of from 35° to 40° Fahr. during the winter months, affording free ventilation whenever the external conditions permit. Water must be used sparingly during the resting period, but excessive dryness at the root must be avoided in these young plants.

An early peach house or vinery is a good place to start them gently into growth, potting them on into 48's as soon as growth is apparent; in this size they will flower, giving one large head or corymb of bloom, and will prove very popular for house decoration.

Give plenty of water and feed the plants during active growth, until the flowers begin to expand, when feeding must be gradually discontinued. Discriminate in the use of the shading, as the flowers will not stand much sunshine early in the season when grown under glass.

Plants two or more years old may be kept well on the dry side during the resting period, in cold houses or frames from which severe frost is excluded, and brought in in batches as required, to keep up a succession. In this manner hydrangeas may be had in flower from spring till September. Certain

varieties respond to slight forcing more readily than others, notably that fine white variety, Mme. Mouillere. I have found this variety to differ somewhat from others of *H. hortensis*, in that it may be had in flower both earlier and later in the season by propagating at different times. Given a sufficient number of plants, it is possible to have this variety in flower eight or nine months of the year. From cuttings struck in August they have flowered in 60-size pots during November and on into December, giving nice useful heads of bloom. Again, from plants started in January they may be had in flower in April.

I have in my mind's eye a pair of specimen plants that were grown on from plants in 48's purchased in the summer of 1922; in the following May, 1923, they flowered splendidly in 24-size pots, having a dozen or more good heads each. Resting them, and again potting them on into 11in. pots, starting them in January in gentle heat, these plants in the following May carried, each, thirty to forty large heads of flower, pure white, averaging 3ft. high by 4ft. through, and being perfectly symmetrical in shape. I merely mention this as an illustration of what may be done in a year or so with hydrangeas.

Two very distinct and beautiful forms of blue varieties of hydrangea are *Mariesii* and *involucrata*. Both of these have fertile flowers in the centre of the corymb, with a row of sterile flowers round the outer

edge, which considerably enhances their beauty.

Another distinct variety, seldom seen, is *H. Sargentii*, with flowers similar to the above, except that the very large corymbs are creamy white in colour. This species differs in many ways from *H. hortensis*. The growth is hard-wooded, erect in habit, with large leaves (not unlike those of a stove plant, *Cyanophyllum magnificum*), with a velvety sheen, and veined; the leaves will not bear exposure to the sun without being considerably scorched and disfigured, but grown in a



HYDRANGEA HORTENSIS IN A SEASIDE GARDEN.



shaded intermediate house it forms both a unique and very decorative plant, in my opinion the foliage being far more beautiful than the flower. Anyone who has hitherto failed with this variety will find it to prove satisfactory grown in the manner described. Many varieties of hydrangeas are hardy, given suitable soil and positions, seeing that they come from various parts of the world—America, China, Japan. Of these, mention may be made of some of the most interesting: *arborea grandiflora*, *quercifolia* (the oak-leaf form), *vestita*, *involucrata*, *paniculata grandiflora*, and others. The last-named is largely used for forcing in pots, and requires to be pruned back annually, flowering as it does on the current season's growth, in large white panicles. It is also one of the best for outdoor cultivation: in this case the pruning should be done in March.

There is a climbing variety named *scandens*, suitable for walls and clothing the trunks of trees. It is self-supporting, after the manner of ivy, and bears white flowers. There is another variety of hydrangea I had almost forgotten to mention—*cyanoclada*, with jet black stems, which always proves interesting, either in or out of flower, on account of its uncommon colour, in a collection.

Hydrangeas will be found to thrive in the following compost: Three parts good fibrous loam, one part peat, one part old mushroom-bed manure, a little soot and some crushed charcoal, adding a 48-size pot of bone-meal to the bushel of soil: mix well several days previous to use, and pot moderately firmly.

Hydrangeas must have a season of rest. After flowering they may be placed on a bed of coal ashes, in full sunshine during the autumn months. Any pruning may then be done, at the same time potting on any plants requiring it. As the season advances, watering may gradually be decreased until the foliage falls, when they

may be wintered in the cold houses or frames. The following list of good varieties of *H. hortensis* can be recommended: *Mme. Mouillere*, *Lilie Mouillere*, *Germanie Mouillere*, *Parzival*, *La Marne*, *Brilliant*, *Triumph*, *Mariesii*, *Helge*, *Lorley*, *Krimhild*, *Mme. H. Hamar*; these constitute a good dozen for pot culture.



AS DECORATIVE SHRUBS HYDRANGEAS ARE EXCELLENT BOTH FOR FOLIAGE AND FLORAL EFFECTS.

With reference to the colour of the blue in hydrangeas, what is needed are decided colours, such as an Oxford and a Cambridge blue. A good clear pink is far better than a muddled between colour, which is neither beautiful nor effective.

I. HAWKES.

## GARDENS OF HEALING.—I

GARDENS of healing, that is, those given over to the cultivation of medicinal herbs, are rarities in Britain. On the Continent they are frequently found both in private and commercial grounds. Such gardens are both interesting and remunerative, and all owners of a bit of spare ground would derive much pleasure and profit if they turned it into a medicinal garden of plants with healing properties.

The work which requires the greatest care in this connection is that of drying the herbs. They should be handled as little and as lightly as possible and never crushed. Trays, such as apples are stored in, should be used. All plants are best dried in the sunshine, but if that is non-existent a room heated by pipes, such as a warm greenhouse, or close to a wall where the heat of the kitchen range is felt, or even a very slow, moderately heated oven will dry the plants efficiently. With very few exceptions all heat other than that of the sun should be slow.

The size of the health garden varies, of course, according to the amount of ground at the owner's disposal. It should be divided off by little paths,

around and between the plots, in the manner of French kitchen gardens, in order that every part of the bed can be within reach of the gardener's hands, and thus the ground is never trodden on. Each plot should have a large, distinctly marked label at its top right-hand corner, and should be kept constantly hoed and entirely free from weeds.

ROMAN CAMOMILE (*Anthemis nobilis*).—Roman or double camomile is one of the most important of medicinal herbs. It is also one that requires the least care in cultivation. It will not grow in heavy land or in wet situations, but likes a hot, dry soil rich in *silica et voilà tout*. Camomile loses none of its properties by desiccation.

The stinking camomile (*A. colutea*), which is almost as ubiquitous as the common groundsel, possesses all the qualities of its rich aristocratic relation, but in a markedly less degree.

The healing virtues of *A. nobilis* are recognised and made use of all over the world, but in our country the plant is not so extensively grown as it ought to be, although it is in constant demand. The flowers cost 7s. 6d. per pound, and are obtained from the Continent, where every garden, large or small, private or

commercial, has its camomile border or patch. In both North and South America large tracts of land are given over to the cultivation of this herb.

In France *tisane de camomile*, or camomile tea, is *de vigueur* after an indigestible meal, and it is used medicinally as a digestive, a tonic and a safe medicine for all intestinal and stomachic disorders, and also as a febrifuge.

This infusion is antiseptic, and its application quickly cleanses and heals all wounds, ulcers and running sores. For this purpose quarter to half an ounce of the dried flowers are steeped in a pint of boiling water and allowed to "draw" like tea. Camomile infusion should *never* be taken internally after it has been infused for over half an hour.

For children suffering from rickets or eczema hot baths in which half a dozen camomile heads have been thrown are both soothing and health giving.

Finally, camomile oil is invaluable for all rheumatic and internal pains if applied *externally*. It is obtained by allowing 3 oz. of the tops of the plant to simmer for two hours in a pint of olive oil.

ANGELICA ARCHANGELICA.—Nature we know grows plants for the cure of diseases



to which animals are subject, and eminent naturalists have recorded many instances of birds and beasts doctoring themselves and their offspring by eating various plants. A notable example is that of the partridge of North America, which gives her little ones the partridge berry to eat when they are out of sorts.

Dogs and cats, as everyone knows, have recourse to the beneficent virtues of couch grass when they feel unwell. It seems only logical to conclude that cures for man's bodily ills are to be found also in the vegetable world.

Angelica Archangelica, known also as the Root of the Holy Ghost, received these celestial names on account of its real or imaginary virtues. In very early times all its parts were considered efficacious against witchcraft and enchantments, and in the Middle Ages it was the sovereign remedy against poison, the plague and all infectious maladies. Nowa-

days it is used daily on the Continent for indigestion, general debility and chronic bronchitis. For external use the fresh leaves of the plant are crushed and applied as poultices in lung and chest diseases.

The roots of angelica should be dried rapidly and placed in air-tight receptacles. They will then retain their medicinal virtues for many years.

A delicious liqueur which is also a digestive, preserving all the virtues of the plant, is made in this way: 1 oz. of the freshly gathered stem of angelica is chopped up and steeped in 2 pints of good brandy during five days, 1 oz. of skinned bitter almonds reduced to a pulp being added. The liquid is then strained through fine muslin and a pint of liquid sugar added to it.

The natural habit of angelica being the banks of streams and ditches and shady woods, it is evident that the plant must be given a shady situation in the health

garden. Seeds of angelica are sown in the spring, and as the plants are very large, they should be thinned out to at least a yard apart.

**PIMPINELLA ANISUM** (Aniseed).—The virtues of this umbellifera are analagous to those of the angelica and are found chiefly in the fruits of the plant, from which a very aromatic oil is extracted. A liqueur known in France as anisette is made by steeping pimpinella fruits in brandy for a month or more. This is constantly used for chronic indigestion and flatulence. A very pleasant tooth-powder which strengthens the gums and whitens the teeth is made by mixing powdered pimpinella seeds with equal parts of charcoal and cinchona bark.

Aniseed likes a rich, damp soil and a south aspect. Seeds should be planted in March, April or May and the plants thinned out to 18 ins. apart.

VICTORIA SLADE.

## SUMMER BEDDING

AT THIS SEASON OF THE YEAR THE SUGGESTIONS PUT FORWARD IN THIS ARTICLE SHOULD PROVE OF ASSISTANCE TO THOSE WHO MAY WISH TO GET AWAY FROM THE ORDINARY STEREOTYPED BEDDING OUT DESIGNS AND SUBJECTS.

**D**AME FASHION plays her part in gardening, and perhaps in no section has she proved herself such a fickle jade as in the furnishing of that part of the garden where beds are annually filled with spring and summer bedding plants. This applies more strongly to summer bedding than to spring bedding, owing, no doubt, to the greater variety of plants suitable for the former scheme. One has to go back many years when "carpet bedding"

to meet the demand. This somewhat formal style changed after a considerable run of popularity to what may be termed the "mixed, or dot, system." This was done, and still is to a great extent, by using various dwarf-flowering or foliage plants for massing, with the addition of taller, graceful foliage and flowering plants, not too thickly, to break the stiffness. This system entailed much work and expense and has, of necessity, practically gone out of fashion.

In many large private gardens the section devoted to summer bedding has of late years been modified, or in any case plants are now used which are less expensive to prepare than was previously the case. In others, where the position of the beds permits it, roses and other hardy plants have been substituted. Though hardy perennials cannot, perhaps, be substituted which will give the same freedom and prolonged display of bloom as many of the typical bedding plants, many combinations of plants can easily be thought out which would give fairly satisfactory results. For instance, beds carpeted with either violas, nepetas, pinks or arabis could have such plants as astilbes, lilliums, gladioli, galtonias, montbretias or campanulas planted among them. Beds also of pentstemons (pale pink) and *Eryngium Oliverianum*, *Anchusa italica* Dropmore variety and *Oenothera biennis*—*Anchusa*, *Delphinium Bella Donna* and *Salvia patens*—*Potentilla Gibson's Scarlet*, *Sidalcea Listeri* and montbretias or *Lilium tigrinum*—*Violas*, *aquilegias* and *Veronica spicata*—*Phlox suffruticosa* *Victoria* and *Pentstemon Chester Scarlet* or *Middleton Gem* would all bloom for the greater part of the summer and, of course, be economical to use.

That there is no falling off in public taste for typical summer bedding is, however, fairly certain. Evidence of this is that the sale of bedding plants has probably never been greater than it is to-day.

It is, fortunately, a trait of an English home, of whatever size, that there must be some flowers surrounding it during the summer. Plants to use and the scheme of planting should be governed somewhat by the design of the flower garden and its



ANTIRRHINUMS IN A PARTERRE.

held sway, and, owing, perhaps, to the novelty of the design rather than to its beauty, it arrested attention and aroused a feeling of curiosity. This in time changed to the massing and ribbon border fashion. Such plants as pelargoniums in variety, *calceolarias*, *petunias*, *verbenas*, *lobelia* and *pyrethrum* were used lavishly, and in many gardens the glasshouses were severely taxed to provide sufficient plants



proximity to the residence. The material also with which the residence is built should have more consideration than is sometimes given it. Who has not seen the dazzling scarlet *Pelargonium Paul Crampel* planted in front of one of the crude brick houses which are now springing up on all sides and shuddered at the sight? How much more pleasing would the effect be with flowers of light blue and lavender, such as *Viola Maggie Mott*, *ageratum*, *Aster sinensis*, *heliotrope* and *Plumbago capensis*. An effective plant, too, for such a position is that charming little *Dahlia Little Othello*, with its dark metallic foliage and crimson blossoms. This plant, which rarely exceeds 18 ins. in height, is not as well known as it deserves to be. *Lemur* is similar. I prefer either of these varieties to the popular *Coltness Gem*, and I know many who have seen them agree with me.

The older red brick house which has been toned down with age should have the association of flowers of dull orange, apricot and salmon or coppery crimson. Suitable plants for providing these colours are readily found in the charming *nemesias*, *begonias*, *antirrhinums* and *calliopsis*. What a beautiful little annual the *nemesia* is with its wide range of colouring! I doubt if it has an equal as a dwarf annual, useful alike for beds and pots.

A white house, somewhat rare perhaps, may be surrounded by flowers of rather bright hues, such as vermillion, blue, bronze and amber. These colours are found in many plants. A few are *antirrhinums*, *begonias*, *Delphinium Blue Butterfly*, *Salvia patens* and *cannas*. The latter, especially the varieties with bronze foliage, are striking.

A grey stone building provides a setting for almost any colour scheme.

Even when the flower-beds are not sufficiently near the residence to affect the colour scheme, they are usually under continuous observation, as distinct from a seclusive garden. It is therefore necessary to use plants as far as possible which will provide a long season of blooming. Where the beds will be continuously viewed close to the eye, and particularly if not on a large scale, a soft harmonising effect will be better than that obtained by boldly contrasting colours. For real beauty delicate colours are undoubtedly best, such as shades of pink, mixtures of pink and white, light blue, straw-coloured yellow, apricots and salmons and soft tones of crimsons. Strong colours may be rich and showy in contrast, but are less beautiful and hardly in such good taste. Where, however, the scheme is a large one with long stretches of beds, strong contrasting colours toned down with graceful foliage plants would be best. Where a bed or group of beds is to be viewed from a distance, an effect should be aimed at which will appear full of expression. Some of the bright *begonias*, *pelargoniums*, *salvias*, *antirrhinums* and *dahlias* suggest themselves.

In arranging foliage plants with the flowers the colour of the foliage should be considered in proportion to the intensity or delicacy of the flowers with which they are mixed. The brighter the flowers the stronger should be the green of the foliage, and the more delicate a corresponding softness. The same proportion should be observed with regard to the habit of the foliage plant. A heavy, bold foliage plant, such as a *ricinus*, would be sadly out of place over a carpet of *nemesias*, whereas a few might be permissible over large-leaved *begonias* and ideal over a thin planting of a dwarf *canna*. Useful foliage plants are *abutilons*, *eulalias*, *Grevillea robusta*, *Acacia lophantha*, *Gnaphalium microphyllum*. When used, the object of such plants is to relieve, not to hide, the carpeting plants.

Many beautiful flowering plants may also be used with great effect as relief plants. Thoughts immediately turn to that delightful old plant *Plumbago capensis*, which greatly enhances a bed of blue *verbenas* or *violas* such as *Maggie Mott*. *Lantanas* are favourites of many, and can be grown in various shapes, such as pyramids or standards, and look well over a carpet of *Verbena venosa* or white *antirrhinums*. Plants can also be pegged down to form a carpet for the taller plants.

*Heliotrope* is always popular and lends itself for use much in the same way as the *lantana*, and has the added charm of scent. Another plant of a more striking colour is *Streptosolen Jamesonii*. This makes an effective bed with a carpet of white or yellow *violas*. It may also be happily associated with warm apricot *antirrhinums*, orange *begonias* or *Coreopsis grandiflora*. A beautiful effect is obtained by a mixture of *Delphinium Blue Butterfly* and white *antirrhinums*.



TUBEROUS BEGONIAS AND FUCHSIAS ARE ADMIRABLE FOR BEDDING PURPOSES.

Few subjects are more attractive than *Fuchsia Coralle*. There are several similar varieties, all hybrids of *Fuchsia triphylla*. They are excellent for bedding, and if given a fairly rich soil and sufficient moisture make splendid plants which bloom profusely for months. A carpeting of a good white *viola* would intensify the pleasing coral colour of the *fuchsia*. *Lobelia cardinalis* rising through a carpet of the grey-leaved *Cineraria maritima* is striking. The use of the dainty grey-foliaged plant *Leucophyton Brownii* as a carpet and a few staked up as relief plants among pale pink *begonias* is an oft-repeated but always pleasing combination. *Calceolaria amplexicaule* is an old plant, but its pale lemon flowers are always permissible. It can be used in various ways, either as a tall plant among dwarf subjects, or it will be equally useful as a foil for taller flowering plants or foliage.

Frequent mention has been made of *antirrhinums*. The selection is endless in colour and in various types from dwarf to tall. They are probably used in greater numbers than any other class of plant.

The dwarf scarlet *Dahlia Coltness Gem* has largely superseded *Pelargonium Paul Crampel* as a bedding plant, and rumour has it that there are not enough plants to meet the demand this year. There are, however, many other good varieties. Mention has already been made of *Little Othello* and *Lemur*. Those partial to a small cactus dahlia should try *René Cayeux*. The plants rarely exceed more than 2 ft. in height, the habit is graceful and the flowers a dazzling crimson scarlet. *Marianne*, a dwarf plant with warm apricot-coloured blooms, will be sure to please if planted in soil which is not rich. It is now classed as a camellia-flowered dahlia. Some of the specialists list quite a lot of varieties of the *Mignon* type, all of which are dwarf and ideal for bedding. For larger beds and taller effects up to 3 ft., the popular miniature-flowered peony type cannot be too strongly recommended.

Ivy-leaved and Cape *pelargoniums* and many annuals not mentioned are excellent when used in the proper place.

These are only a few ideas and could be extended indefinitely. Summer bedding may not be regarded in such an important light as it was some years ago. Nevertheless, in carrying out a scheme, whether large or small, the aim should be to get an effect which will be bright but not gaudy, appealing yet restful, and the arrangement such that it represents a work of art.

ARTHUR J. COBB.



# SWEET-SCENTED ALPINES

FRAGRANCE IS ONE OF THE MOST VALUED ASSETS IN THE ROCK GARDEN, AND A FEW OF THE ALPINE SUBJECTS MENTIONED IN THIS ARTICLE SHOULD BE INCLUDED FOR THEIR PERFUME AS WELL AS FOR THEIR BEAUTY OF FORM.

THE voice of the multitude is unanimous that a sweet perfume should weigh very largely in the estimate of all flowers; and the absence of scent, characteristic of most alpine, and nearly all high alpine, does a disservice to the rock garden. The fewer the rock plants that are scented, therefore, the more should they be singled out for mention and for attention to their cultivation. Yet, now that I have racked memory and books for alpine notable for their perfumes, their number is not really exiguous. On the hills *Thymus Serpyllum* charms by its yard-wide mats of large-headed floriferousness as well as by its scent, and the rock garden would gain by the inclusion of its numerous varieties—lemon, or caraway, or camphor, or just "thyme." On the hills one takes in wide-open lungfuls of honeyed breaths of *Trifolium alpinum*, and why not in the garden, be the clover never so humble? But of alpine more august than these my notebook has now many pages of names; and in the first instance I would write of those which fill the mountain-sides with their ubiquitous fragrance.

Two memories take first rank: one, the high upland pasture that lies immediately behind the Pordoi Hotel in the Dolomites at about 8,000ft.; the other, the stony sunburnt slope not much above sea level that rises from Torbole towards the sky-high peak of Monte Altissimo di Monte Baldo. Wherever you roam, the exquisite fragrance of *Daphne striata* haunts you on the one, and of *Dianthus monspessulanus* on the other; while on both, the nose in advance of the eye tells you that the daphne or pink are

around—blessed the alpine that proclaims its vicinity by its perfume!

On the Pordoi and in the Val del Fain on the Bernina the daphne makes charming ground-hugging hummocks, and its

scent alone, while *rupestris* ranks among the most beautiful of all alpine.

*Dianthus monspessulanus*, on stony slopes above Torbole or rioting in fields along the Val di Ledro as poppies do at

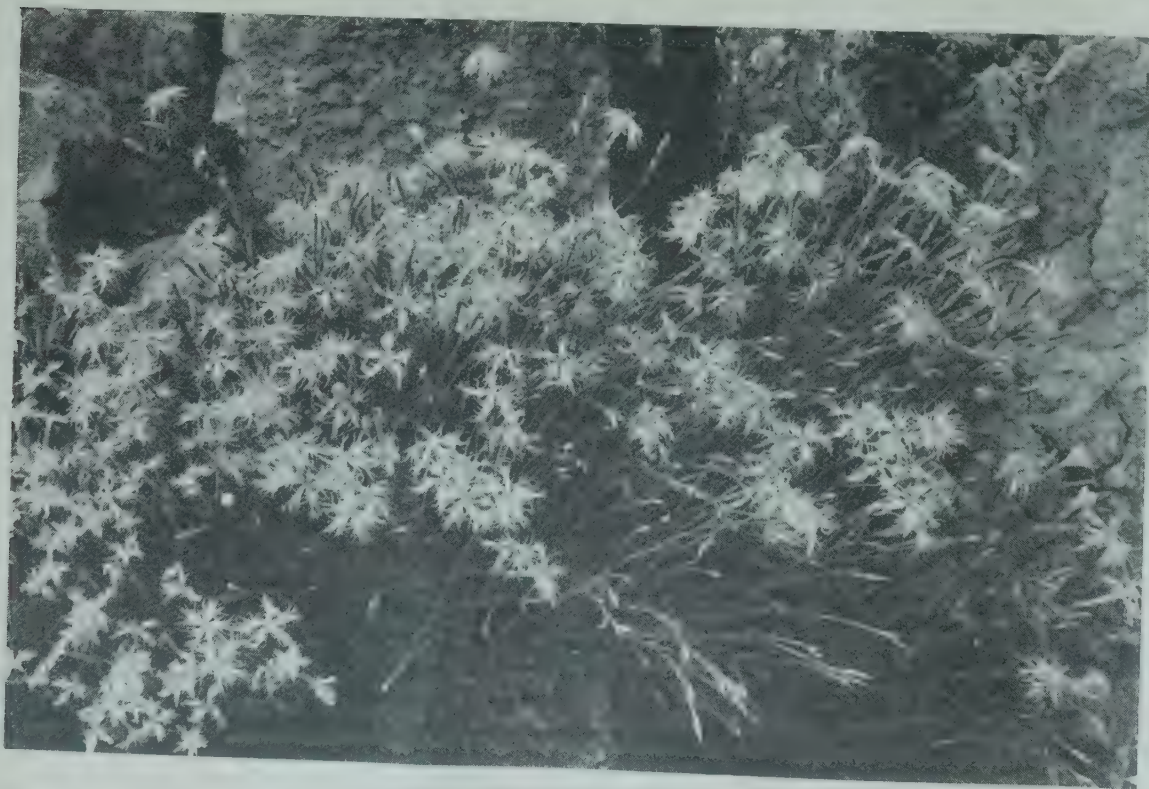


THE LARGE SPREADING MATS OF *THYMUS SERPYLLUM* CLOTHED WITH MYRIADS OF TINY SCENTED FLOWERS.

colour when young is a good rose-pink. Strictures have been passed on *striata*, and panegyrics lavished on *Cneorum*; but sight and scent on the Pordoi make you sensible that you would not love the one so much did you not love the other—just as much. The rare *rupestris*, the less rare *alpina* and *Blagayana*, and the common but dull-flowered and lanky *Mezereum* are all of high value for their

home—turning into pinks and poppies what was meant for corn—has close relationship with the well known *D. superbus*. But whereas *superbus* is a tall straggly single plant of woodlands (as in the woods of sils in the Engadine, most beautiful, second only to *Misurina*, of all alpine woods), *monspessulanus* forms tight tufts a foot or two square, a foot in height, in full sun on scree or field, with lavender blossoms, darkly mottled (or all white) equaling in number the garden pink. The higher form of *monspessulanus*, called *D. m. Sternbergii*, not more than 6ins. high, is found on the higher slopes of Monte Baldo and also just below the precipices at the back of the Faloria Hotel at Cortina, and again on the stony lawn in front of the hotel at Tre Croce, half-way between Cortina and *Misurina*. There is also a high alpine form of *superbus*, called *speciosus*. Of the exact relation between these forms I am unaware, and it is sufficient to say that *DD. speciosus, superbus, Sternbergii, monspessulanus, squarrosus* and, perhaps, *plumarius*, are subspecies of *D. fimbriatus*, the fringed pink. All are invaluable for their sweet pervading perfume, and whereas *superbus* fails of being truly perennial, the higher, dwarfer and neater species have no such adverse reports.

The valerians must be the last to be included at present. The tiny valerians—*celtica*, the ancient Nard, smelling of patchouli;



*DIANTHUS SUPERBUS*, QUAINLY FRINGED AND DELICIOUSLY FRAGRANT, IS ONE OF THE MOST CHARMING OF SWEET-SCENTED ALPINES.



*elongata*; *globulariaefolia*; *salinuca* and *tripteris*, are valuable for their intense sweetness alone, their tight little spikes of dingy flowers reckoning not at all. The jewel is the almost stemless *V. supina* that unites inimitable fragrance with wide mats of distinct

and clear pink flowers. Alas! that *supina* haunts the wild cauldrons that cleave the southern elevation of the Schlern, up from the Ischamin-thal near Bozen, where you mount the precipices by ladders and Baedeker warns you of "inconvenience to those subject to giddiness." If

I had to ascend a precipice by a ladder, it is not *Valeriana supina* that I would be looking for; and as giddiness belikes me not, I regretfully conclude that *supina* is in no danger of extirpation by me and must continue to waste its sweetness on the mountain air. E. E. T.

## TWO ORNAMENTAL PLANTS

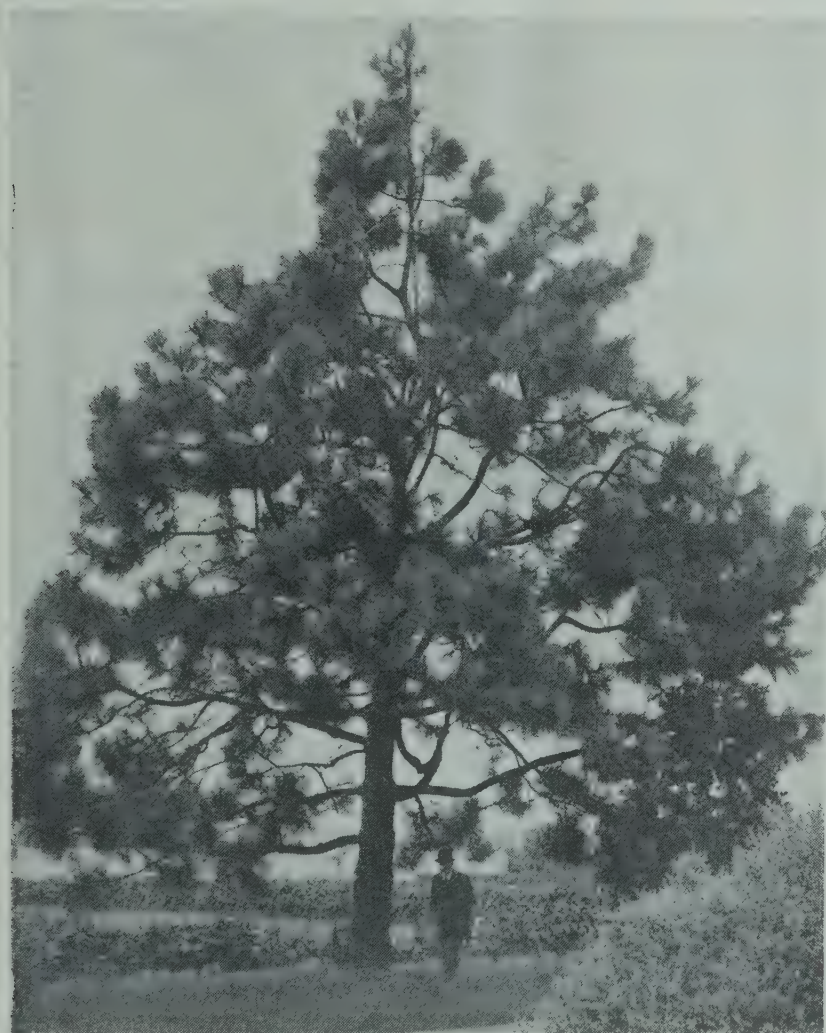
### PINUS JEFFREYI.

THE Californian black pine, in its native home also called truckee or sapwood pine, according to Britton has rather often been planted on the Continent. One of the best specimens I have met with stands on the small island Scharfenberg at Tegel, near Berlin, in the once famous collection of Dr. Bolle. Quite a number of good plants can be seen in private gardens in western Germany, for instance, along the Rhine. It has been tried rather successfully as a forest tree in the same way as *P. ponderosa*, the bull pine, of which *P. Jeffreyi* is often regarded as only a variety. According to Jepson, the well known author of the Californian flora, *P. Jeffreyi* merges insensibly into *ponderosa*, but there may be

With its large cones *P. Jeffreyi* forms one of the most interesting species of the genus *pinus*. It has proved hardier on the Continent, as one might expect from its habitat. According to Britton it occurs on dry volcanic mountains from southern Oregon through California to lower California, often forming pure forests. In the most favourable situations it occasionally reaches a height of 230ft.

### RUBUS BIFLORUS VAR. QUINQUEFLORUS.

Among our European representatives of the genus *rubus* there are, in spite of the enormous number of so-called species, very few distinct types. It is China, the dendrological paradise that sends us the most striking and



THE CALIFORNIAN BLACK PINE, *P. JEFFREYI*.

intermediate forms of hybrid origin. For horticultural purposes it may well be regarded as a good species, differing from *ponderosa* in its distinctly glaucous young shoots, its hardly resinous buds, its somewhat stiffer pale bluish-green leaves, which measure only from 4ins. to 8½ins. in length, and in its larger, usually purplish cones which are up to 12ins. long. If one breaks a young shoot it smells strongly of oranges, while the young growth of *ponderosa* has a peculiar smell of turpentine. The illustration shows a fine plant of *P. Jeffreyi* from the late Mr. Allard's famous collection of conifers at La Maulévie, near Angers, in France. The old gentleman, one of the keenest collectors and finest men I have ever met, is seen standing under the tree. He had brought together an exceedingly rich collection of broad-leaved evergreens, too. The arboretum belongs at present to the Institute Pasteur at Paris.



A FINE CHINESE RASPBERRY, *R. BIFLORUS QUINQUEFLORUS*

ornamental types of this genus, too. Take, for instance, such semi-evergreen or evergreen species as *R. Henryi* (*R. bambusarum*), *R. chroosepalus* or *R. flagelliflorus*. But of a very different aspect are the deciduous *R. Giraldianus* and the one I wish to speak of at present, *R. biflorus*, in its Chinese variety, *quinqueflorus*. The illustration shows at once the striking effect of a vigorous plant. I took the photograph in the garden of Count Herbert Schaffgotsch at Purgstall, Lower Austria, where this keen and enthusiastic amateur has brought together a surprisingly rich collection of rare plants. I shall speak of his fine rock garden later on. Among the woody plants of his collection this Chinese raspberry is of a peculiar interest. The typical *R. biflorus* is a native of the Himalaya, and has already been introduced in 1818, but never became very well known, at least in the gardens of the Continent. In 1907 Wilson



made us acquainted with the Chinese form that seems to be a more vigorous and much hardier plant. Its strong shoots reach a height of more than 13ft., and are covered with a beautiful white waxy bloom, and armed with straight prickles. As Bean has already stated, during fall and winter a group of this raspberry makes one of the most striking plant pictures in the open air. There are two other Chinese species with similar

white stems, *R. lasiostylus* and *R. Giraldianus*. The last one is a strong, beautiful plant too, but it has rather insignificant black fruits, while the fruits of *R. biflorus* are of a wonderful amber colour or almost golden yellow, and of an excellent taste. Bailey is right in speaking of the variety as of a promising fruit-bearing as well as ornamental plant.

CAMILLO SCHNEIDER.

## WEEDLESS PATHS AND COURTYARDS

SOME forms of tidiness in the garden savour of fussy artificiality which jars upon the nerves of those who love the apparent freedom of natural effects, but surely none will venture to suggest that weedy paths may be tolerated. Among all the labours of garden control no task is more irksome and extravagant in its absorption of time and effort than the constant weeding of hard gravel drives or the crevices between the slabs of paved garden walks. Weed-killers should, therefore, have a special interest at this season when time can ill be spared for unprofitable labour.

Nervous fear of handling poisons has prejudiced some minds against these labour-saving preparations, but be it remembered many things are commonly used without the slightest compunction, not because they are harmless, but because less emphasis has been laid upon the danger accompanying their use than in the case of weed-killers. Complaint against reiterated warning of the baneful power of weed-killers would be unwise; to be forewarned is better than to err in ignorance, and the one thing essential to safety in the use of poisons is to be clearly informed of the possible results of careless handling. The frequently recommended alternative to poisonous weed-killer is to use common salt, but that is a very poor substitute, for although immediate contact with weeds enables the salt quickly to discolour and maybe actually kill them, as soon as rains wash the salt into the gravel chemical conversion begins, and soon the salt becomes plant food, which encourages a more robust growth of weeds.

Arsenical weed-killer poisons the weeds, and leaves the poison in the surface gravel, and for a long period not only seeds fail to germinate, but stout weeds are prevented from thrusting new growths through the surface.

One of the most persistent weeds that may break through a firmly constructed gravel drive is the "bell-bind," or wild convolvulus. The depth to which the

roots penetrate into subsoil of practically any description, not even excepting solid chalk, makes it impossible to kill an established colony at a single operation, but close observation of a particular pathway laid on a chalk hillside conclusively proved that after killing the developed herbage the poisoned surface arrested the progress of subsequent growths, killing them within an inch of the surface for a period of six months after a single dressing with weed-killer. The second season growth of bell-bind was much later in making its appearance, when a prompt application of weed-killer stopped its progress for the rest of that season. Last year—the third season—July was reached before the first few weak growths showed through the surface, and this year May has arrived with no necessity at present to use weed-killer on that path. The value of these results becomes apparent when one attempts to estimate the amount of tedious labour which would have been involved during three whole seasons and part of the fourth in hand pulling the growth of bell-bind, which has its roots deep down in a great seam of chalk. Even unskilled garden labour is costly to-day, and unskilled weeding frequently proves to be a vexatious waste of money, while the amateur who entirely maintains even a small garden in spare time will find plenty to do apart from incessant path weeding.

Powerful brands of weed-killer made by well known chemists are readily available, and small quantities may be purchased in sealed canisters or cartons, in liquid or powder form, from local horticultural sundriesmen. Their prices vary according to their strength, but when considerable quantities are to be used it is more economical to buy the brands which will stand greatest dilution, because it means less carriage charges, and even though the prices quoted may be inclusive of delivery, it is well to remember there is no such thing as "free" delivery, since railway companies do not carry goods without

payment. Herein lies an advantage of weed-killers sent out in powder form, and large users will be well advised to bear this in mind, but for small gardens the liquid has the advantage of being more easily prepared for use without delay, no risk being involved by even a brief period of standing to dissolve as is necessary with powder.

Any of the following names on a vessel of weed-killer will be sufficient guarantee of good quality: Abol Limited, Joseph Bentley, Limited, Corry and Co., McDougall and Robertson, Cooper and Nephews, G. H. Richards, Ltd., Tomlinson and Hayward, Limited, Morris, Little and Son, Limited, Mark Smith, Limited, The Briton Ferry Chemical and Manure Company, Limited, Stonehouse Works Company, Limited, Robinson Brothers, Limited, G. Harrison, Acme Chemical Company, Limited, Garden Supplies, Limited. All brands are sent out with plain directions regarding the strength at which to use, and the method of mixing, and these should be accurately followed.

Galvanised water cans are better than painted ones, because the acids usually peel off the paint. A fine rose on the can is better than a coarse one, because too rapid a flow will cause the liquid to run off the hard surface of the path to the lower level of the sides, resulting in uneven distribution and waste of strength.

The main points to observe are to avoid using it when the ground is very wet or when rain threatens, and to take care that the weed-killer does not reach growing edging plants, grass verges, roots of climbers or drains which connect with ponds. Thoroughly wash all utensils *immediately* after use, and store weed-killer under lock and key. For the benefit of those who will not use poisonous weed-killers some non-poisonous brands are obtainable, and although these will only stand about half the dilution the poisonous brands will do, they are every bit as capable of destroying weeds.

L. I. ATRIS.

## SERVICE FOR READERS

Though so many subjects are dealt with in each issue of *THE GARDEN*, it must constantly happen that readers seek information which is not immediately available. In such circumstances they should make use of our new Service Department. Through its medium each reader's own particular enquiry can be dealt with. No matter what the question is, whether advice is sought as to—

RESTOCKING A GARDEN, COLOUR SCHEMES FOR GARDENS, THE BEST PLANTS FOR CERTAIN SITUATIONS, WHERE TO OBTAIN NEW AND RARE PLANTS, INSECT PESTS, NAMING OF PLANTS, AND THE HUNDRED AND ONE OTHER DETAILS RELATING TO THE GARDEN—

there is always information available from a staff of expert contributors and consultants; and there is no charge for this. It is one of the additional means of Service which *THE GARDEN* is glad to render to its readers.

Also, there is the further convenience which the Service Department affords of supplying readers with data about anything that is advertised in the pages of the paper. Thus, on receipt of an enquiry, particulars will be sent of, say, half a dozen things about which the reader seeks information. The only stipulation is that a stamped addressed envelope shall be sent with the enquiry.

All communications should be addressed to the Service Department, *THE GARDEN*, 20, Tavistock Street, Covent Garden, London, W.C.2.



## SIMPLE GARDENING

## AUTUMN CAULIFLOWERS AND WINTER GREENS.

**N**EITHER cauliflowers nor winter greens generally, withstand severe checks without suffering more or less. I know how difficult it is for amateurs always to devote the necessary time to early and intermediate transplanting which is such a help in the due preparation of the plants prior to their final planting-out. Usually, the seeds are sown in poor soil in an open border; the resultant seedlings are allowed to grow, often to a height of 1ft., before they are violently pulled up, generally in a dry state, when many valuable roots are sacrificed, and replanted in dry, poor soil, too, during the hottest days of summer. There need not be any wonder at the appearance of "clubbing," at delay in the formation of healthy roots and new. Frequently the plants are "clubbed" in their seed-beds before they are permanently put out. Do not sow seeds in the same bed year after year; do not even transplant the resultant plants in the same nursery beds, and do not finally plant them in the same quarters. Be content to grow fewer plants and treat them very well; the results will be much more satisfactory. Now, possibly many readers will possess beds of seedling plants of cauliflowers and winter greens. Some, no doubt, do follow the good plan of intermediate transplanting. I would persuade those who have not done so to try it this year. It is beneficial where ground is vacant, but doubly so where it is absolutely necessary to keep the young plants somewhere till ground is cleared. There is great gain, as the plants possess plenty of roots and good balls of soil, and are not seriously checked when finally transplanted if ordinary care be taken.

## SUMMER WATERING AND PLANT FEEDING.

Watering, according to position of garden, its soil and the available water supply, may be a light or a heavy burdensome occupation. The feeding of plants is not, in any case, as a little of it goes a long way if correctly carried out. Suppose we consider the greenhouse and conservatory plants first. It is a fact that many residents in towns and their suburbs are obliged to pot their plants in unsuitable compost—at least, in such a mixture that does not induce free root-action. The consequence is that numerous plants are unsatisfactory, and the inexperienced cultivator at once applies large doses of strong manures. This is, of course, wrong; while roots are few and, for a reasonable time after plants are re-potted, clear water only should be used, and very carefully, too, as in a too dry or too wet soil roots do not increase satisfactorily. The right time to apply a stimulant to a pot plant is directly the pot begins to fill with roots—when the latter begin to form a network round the outside portion of the ball of soil. I am not

dealing with any special kinds of manure, as space will not permit of it, but in every case follow the instructions given with the manures and be under rather than over in measuring out the quantities. Fruits are mostly benefited if stimulants are applied when they are swelling, before, and after, the stones in them harden. Vegetables, too, when the growth is beginning to be very active and pods are swelling or hearts forming. Flowering plants in borders when the flower stems begin to form. The soil should always be moist.

## THINNING HARDY FRUITS.

The finest specimens of apples and pears are generally grown on cordon-trained trees. These trees are restricted



to one or two main stems, and they are, as a rule, carefully watched and attended to during the summer months, while the ordinary bush, pyramid or standard tree is not. All cultivators do not possess cordons, but they may grow really fine fruits on bushes, espaliers and standards if they will thin out in good time the smaller specimens. Plums, peaches and apricots on walls should have first place in this work, as they will be more forward. The thinning should be done gradually, not all at one time. The fruits to retain on wall trees are those that are prominent and placed well away from the wall. At the final thinning plums should be left at 7ins. apart, apricots 9ins. and nectarines 9ins., peaches being allowed a little extra space. These distances are for the whole tree. It may be that more fruits will form on certain branches than on others. In such cases leave the fruits closer together to make up for the bare branches, and so secure the full crop for the tree as a whole. Pears are easily thinned, but apples are more

difficult, because they grow in close clusters. The one retained should not be loosened when the surplus fruits are removed. The letter *a* shows the fruit to retain; *b, b, b*, the ones to pull off; *c* shows the best apple of the bunch; and *d* the ones to remove. Timely and judicious thinning results in such specimen fruits as the one shown at *e*.

## GATHERING AND PACKING FLOWERS.

It is a pleasurable occupation preparing ground and growing flowering plants in it, and much more so gathering and sending, by post or train, some of the resultant flowers to friends and hospitals. Soon, now, our gardens will be overflowing with hardy flowers and, if we desire to cut and pack some of them, we should carry out the work in the right way. Roses, no doubt, followed closely by sweet peas, will claim general attention. The first named do not retain their freshness very long, neither do the sweet peas. It is useless cutting roses half-developed or fully so. They should be in that stage just showing the colour in the buds. I once wished to make a shower bouquet for a competition, using a particular rose. Not having sufficient, I bought some more in the bud stage—this being permitted by the rules—and exhibited the bouquet three days later, all the flowers being half and three parts developed. It was awarded first prize. Sweet peas should have at least one flower-bud on each stem and not all the buds fully developed. Annuals and spikes of herbaceous flowers should be in a state about three parts developed. I think the ideal time to cut the flowers is very early in the morning. The plants should be watered the previous evening, the spikes cut early the following morning and forthwith placed in water in a cool shed out of draughts. Use damp moss (not cut grass, as the latter heats) round the stems. Pack the flowers gently but firmly together in wooden boxes. Cover the flowers first with white, then with blue tissue paper. Have the stems moist, the flowers dry. GEORGE GARNER.

**Gardens Open to the Public.—Aldenham House Gardens.**—The Hon. Vicary Gibbs has again kindly consented to open the gardens at Aldenham House to the public during the Saturday afternoons of July, August and September, and the August Bank Holiday, on the same conditions as previous years, viz., that no dogs be admitted, and that children must be under the control of grown-up persons. On Saturday, July 18th, the Elstree Floral Fête will be held, when admission will only be by payment at the gates.

**The Gardeners' Royal Benevolent Institution.**—The Right Hon. Austen Chamberlain, M.P., has promised to preside at the eightieth anniversary festival dinner of this Institution at the Grocers' Hall, on Thursday, July 2nd next.

**National Gladiolus Society.**—The committee of this Society has arranged for their show to be held at the R.H.S. Hall, Vincent Square, on August 25th. Schedules can be obtained from Mr. A. Amos, 10, Bergholt Road, Colchester.



# GARDENING OF THE MONTH

## FLOWER GARDEN.

**ANNUALS.**—Thin out. Transplant further batches. Sow a few hardy annuals for autumn flowering. Water frequently. Stake carefully any that have thin, straggling growths. Pinch the points of clarkia, calendulas, godetias and helichrysums.

**BEDDING.**—Plant out at once and water frequently until established.

**BIENNIALS.**—Sow in prepared beds wall-flowers, myosotis, sweet williams, Canterbury bells, aquilegias, etc.

**BULBS.**—Lift soon, plant out in wild garden or dry off and later store in boxes.

**CHRYSANTHEMUMS.**—Stake border varieties, keep them free from pests.

**DAHLIAS.**—Plant out during the first week of June.

**HERBACEOUS BORDERS.**—Weed and hoe regularly. Water, if necessary. Restrict growths of strong-growing perennials, such as asters. Stake all plants soon, especially gladioli and hollyhocks. Fill in gaps with annuals.

**LUPINS.**—Sow seed of *Lupinus arboreus*, or strike from cuttings. Insert short-jointed shoots in sandy soil in a cold frame.

**PERENNIALS.**—Strike from cuttings and sow seed in pans in frames or in the open ground.

**PESTS.**—Fumigate the soil with carbon bisulphide for ants. Keep down aphids and caterpillars by spraying with Abol or Kata-kill. Watch for slugs and destroy.

**POLYANTHUS.**—Sow seed of the Munstead strain. Lift and divide plants after flowering. Plant out in well prepared beds in partial shade. Water frequently.

**ROSES.**—Water rose garden. Feed roses with liquid manure. If attacked by mildew, dust with flowers of sulphur. Spray with soft soap and tobacco water for aphids. Pull up suckers of bush roses. Tie up ramblers and climbers.

**SWEET PEAS.**—Feed weekly with liquid manure. Water, if dry. Keep the surface hoed.

## HARDY FRUIT.

**APPLES.**—Spray with soft soap, quassia extract to keep down aphids.

**APRICOTS.**—Stop gross shoots. Prune back side growths to within 6 ins. Do not stop the leaders. Thin the fruit, and net the trees. Do not let them suffer from drought. Apply liquid manure at intervals.

**CHERRIES, DESSERT.**—Shorten back side growths, net the trees.

**CURRENTS.**—Summer prune the side shoots. Keep down aphids. Net the bushes if possible. Burn all prunings.

**FIGS.**—Regulate growths and tie in shoots.

**GOOSEBERRIES.**—Thin shoots of dessert varieties. Cut off and burn shoots infected with gooseberry mildew. Gather a portion of the fruit.

**PEACHES.**—Stop gross shoots. Lay in young wood. Thin partially the fruit. Syringe to keep clean.

**PEARS.**—Summer prune the young shoots. Do not touch the leaders. Thin cordon pears partially when fruit swelling and pinch side shoots gradually. Syringe regularly to keep trees clean.

**PLUMS, WALL.**—Shorten back side growths, lay in young wood. Water with liquid manure occasionally.

**RASPBERRIES.**—Mulch with rotted manure.

**RHUBARB.**—Cut off flower spikes and cease pulling at end of month.

**STRAWBERRIES.**—Hoe, lay clean straw under plants and net, if not already done. Water when fruit swelling.

**VINES.**—Disbud freely. Leave well-placed strong shoots. Stop side shoots two joints beyond the bunch.

## VEGETABLES.

**ASPARAGUS.**—Do not cut after mid-June. Give a dressing of salt.

**BEANS.**—Stake runner beans. Make another sowing of dwarf and runner beans. Pinch tops of broad beans if aphids present.

**CARDOONS AND CELERIAC.**—Plant out now.

**CAULIFLOWERS.**—Plant out. Water those in permanent quarters.

**CELERY.**—Plant out now. Water for a week or two. Dust with soot.

**CHICORY.**—Sow early in the month.

**CUCUMBERS.**—Plant out another batch in frames. Keep frames closed for several days. Damp down and syringe regularly. Peg down and stop established cucumbers.

**ENDIVE AND CORN SALAD.**—Sow now for early supplies.

**JERUSALEM ARTICHOKE.**—Draw up soil round tubers.

**LEeks.**—Hoe between the rows and plant out remainder.

**MARROWS.**—Plant out now and protect with hand lights until established.

**ONIONS.**—Dust with lime and sulphur or spray with Burgundy mixture, if attacked by mildew. Give a light dressing of nitrate of soda. Sow onion "sets" on poor soil. Spray with paraffin emulsion to ward off onion fly.

**PEAS.**—Sow Autocrat peas during the first week. Draw up soil round plants, give a light mulch of rotted manure, if possible.

**POTATOES.**—Earth up and leave a groove on top of the ridge. Spray with Bordeaux mixture as a preventive against potato blight.

**SEAKALE.**—Disbud, leaving one strong shoot only.

**SEEDLINGS.**—Plant out in showery weather, cabbages, early broccoli, leeks, kales, savoy, Brussel sprouts and tomatoes.

**SPINACH.**—Thin seedlings, and hoe. Sow at once New Zealand varieties.

**SPINACH BEET.**—Sow now.

**TURNIPS.**—Sow on shady border. Thin out seedlings. Dust with soot and lime to check turnip fly.

**GENERAL.**—Hoe regularly. Keep down all weeds. Thin beet, carrots, parsnips.

## SHRUBS.

**FLOWERING SHRUBS.**—Prune, after flowering. Lightly fork through the shrubbery.

**RHODODENDRONS.**—Remove seed heads.

**BOX EDGING.**—Clip now.

**SUCKERS.**—Remove all from grafted trees, such as lilacs, *Viburnum Carlesii*, etc.

## ROCK GARDEN.

**AQUILEGIA GLANDULOSA.**—Sow seeds in cold frames. Transfer to flowering quarters when quite young. Water regularly.

**AUBRIETIA.**—Sow seed in frames, in pots or pans, with ample drainage. Shade pans until germination takes place.

**GENERAL.**—Hoe, weed and keep surface loosened. Water liberally. Cut back rampant rock plants to prevent them over-running others. Propagate by cuttings such plants as aubrietia, arabis, alyssum, iberis, etc.

## FLOWERS UNDER GLASS.

**BOUVARDIAS.**—Pot up young plants. Stop them at each second leaf. Syringe to keep down pests. Vaporise with sulphur to keep down mite. Shade if very hot.

**CALANTHES.**—Feed with liquid cow manure. Give a fair amount of heat. Shade slightly and give liberal supplies of water.

**CALCEOLARIAS.**—Sow seed of herbaceous varieties. Shade and cover with glass until after germination. Prick off into pans of light, rich soil, when large enough. Place in a frame in a cool position.

**CARNATIONS.**—Select healthy malmaison carnations for layering. Plant in cold frames

and later layer in usual way. Lift and pot when rooted and store in a cold frame or greenhouse. Pinch points of tree carnations. Syringe daily. Stand outside in frames carnations which have finished flowering. Syringe to keep down red spider.

**CINERARIAS.**—Prick off into boxes and place in a frame in a shady situation.

**CHRYSANTHEMUMS.**—Water those standing outside. Stake and tie the plants. Give final potting at once if not already done. Leave room for top-dressing. Watch for leaf miner. Remove infested leaves and syringe with quassia extract. Stop late flowering bush varieties.

**CYCLAMEN.**—Place in a cold frame, shade and syringe. Sow seed in slight heat.

**HUMEA ELEGANS.**—Sow seed now in pans. Place in slight heat.

**LILIUMS.**—Stake and tie loosely. Feed.

**MIGNONETTE.**—Sow in a cold frame.

**POINSETTIA.**—Take cuttings with a heel. Select young shoots about 4 ins. in length. Insert singly in pots and place in a warm propagating case. Shade and do not let the cuttings flag.

**PRIMULAS.**—Sow seed of *P. kewensis*, *P. verticillata* and *P. floribunda* in cold pit or greenhouse. Prick off and keep in frames for the summer.

**ROSES.**—Top-dress and stand outside on boards in full sun. Spray with potassium sulphide if mildew seen. If attacked by aphids, spray with quassia extract and soft soap or Abol.

**STOCKS.**—Sow, in a cold frame, Brompton stocks for winter flowering. Remove lights when germination has taken place.

**GENERAL.**—Prune flowering shrubs. Ventilate well, water twice daily and damp down the walks. Stand any suitable hard-wooded plants outside on boards or on an ash bed.

## FRUITS AND VEGETABLES UNDER GLASS.

**APRICOTS.**—Pinch points of side growths. Syringe under leaves to keep down red spider.

**FIGS.**—Do not let these suffer from lack of water. Ventilate freely trees ripening fruit.

**MELONS.**—Top-dress mounds with rich compost. Maintain a warm atmosphere. Keep thrips and red spider in check. Admit air more freely when fruit ripening. Support fruit in nets.

**ORCHARD HOUSE.**—Give copious supplies of water to pot fruit. Feed with liquid manure when fruit set and give a dressing of some reliable fertiliser. Remove superfluous shoots and pinch side shoots to six or eight leaves, but do not touch the leader. Ventilate well and leave on a small amount of ventilation each night. Vaporise house directly aphids seen.

**PEACHES AND NECTARINES.**—Give more air. Give a good watering just as the fruit begins to show colour. Do not syringe when fruit begins to ripen, but continue to damp down occasionally to prevent an attack of red spider. Thin fruit and tie in young shoots.

**VINES.**—Water well before colouring. Prevent scorching. Thin late varieties. Do not thin the shoulder too much. Support upper arms with raffia. Pinch and regulate the shoots. Give plenty of air whenever possible.

**CUCUMBERS.**—Top-dress, feed with liquid manure. Clean out any exhausted plants, wash down house, remake mounds of soil. Plant out young cucumbers when soil warmed through. Damp down and syringe twice daily.

**TOMATOES.**—Top-dress, feed frequently with liquid manure. Pinch side growths. Tie up regularly. Ventilate night and day. Give a dusting of Clay's fertiliser at intervals. Fumigate with hydro-cyanic acid gas if white fly seen.



# WATER LILIES WATER LILIES WATER LILIES

WRITE FOR CATALOGUE.

Eighty different varieties listed, in a wonderful range of colours. Other Aquatics and Bog Plants a speciality.

ADVICE GIVEN FREE.

**G. REUTHE,**  
Keston Nurseries, KENT.

## TRY 'FERRY' FIRST INSECTICIDES

Keep your flowers, vegetables and trees perfectly clean and healthy with the famous "Ferry" Insecticide. Non poisonous, reliable and economical. 1 gal. 7/6; 2 gals. 14/-; 5 gals. 33/- Carriage paid, for cash with order, to nearest Railway Station in England and Wales. **SEND YOUR ORDER TO-DAY.**



THE BRITON FERRY CHEMICAL & MANURE CO., LTD., Briton Ferry, South Wales (Est 1886)

## WISP'S PERENNIAL BROCCOLI

Lasts many years and gives a crop each year of from 5 to 12 good heads. **W SEED NOW, 1/- per Packet; PLANTS, 1/- per doz., 5/- per 100. Ready now.** GROOM & CO., 5, Guilden Sutton, CHESTER

## M. ARTINDALE & SON, NURSERYMEN — SHEFFIELD

Winners of the ALBERT STEPHENSON SILVER CUP AT THE SOUTHPORT FLORAL FETE FOR GLADIOLI —CATALOGUES ON APPLICATION—

## DOWNER'S Usually Silent" Lupins

Are now in full blossom and can be seen in all their glorious beauty at DOWNER'S DRAYTON MANOR NURSERIES (Dept. 2) CHICHESTER

## KNAP HILL NURSERY WOKING — SURREY

EXECUTORS of the LATE ANTHONY WATERER respectfully INVITE INSPECTION of the AZALEAS and RHODODENDRONS which are now in bloom.

Hours 10 to 5 daily (Sundays excepted.)

Motors are not allowed in the grounds.

# REAMSBOTTOM'S ANEMONES

Gold Medal St. Brigid

(None Genuine without our Gold Medal Seal.)

12, 3/-; 25, 5/6; 50, 9/6; 100, 18/-

Plant now for bloom from late Summer onwards throughout Autumn and Winter.

Miss Campbell, Harewood, Seaton, Feb. 21st, 1925 writes:—"The St. Brigid Anemones I had from you (MAY, 1924) were VERY beautiful and are in bloom now."

Please write for Current Price List of Choicest Flowers for planting now.

PLEASE MENTION "THE GARDEN" WHEN WRITING.

REAMSBOTTOM & CO., TOWER NURSERIES,  
WEST DRAYTON, MIDDLESEX.



Please mention THE GARDEN when writing.

## FOSTER & PEARSON LIMITED

Established 1841

Please write for Estimates for durable Greenhouses, Boilers, etc., to

**BEESTON  
NOTTS**

# Abol

## Aids to a Perfect Garden

Abol Specialities are used and recommended by experts. They are always reliable, economical and safe, and are now recognised as standard horticultural requisites.

### Abol Non-poisonous Insecticide

A sure-kill for Green Fly, American Blight and other insects. Without equal as a remedy for mildew on Roses, etc. Used in the Royal Gardens. ½ pt. 1/4; pt. 2/2; qt. 3/4; ½ gall. 5/3; gall. 9/6.

### Abol Patent Syringes

Give a perfect spray which may be varied from fine to medium or coarse, as desired. Specially recommended by the National Rose Society. Last a lifetime. No. 4 (1×14), 16/4; No. 5 (1×20), 21/-; No. 6 (1½×20), 26/- Bend extra, 1/6

### Abol White Fly Compound

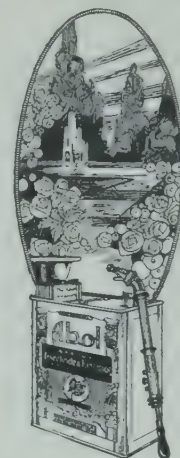
A safe remedy for White Fly on Tomatoes and Cucumbers. Economical and easy to apply. Simply pour down centre path of the house at 2½ fluid ozs. to 1,000 cubic feet. From ½ pt. 1/- to gall. 15/- Postage extra.

### Abol Special Manures

For Roses, Sweet Peas, Chrysanthemums, Tomatoes, Potatoes, and Hop Manure; also Abol Horticultural all-round Fertilizer.

### Abol Weed Killer (Poison)

An extremely reliable and economical preparation, which entirely eradicates weeds from garden paths and walks, carriage drives, etc. In liquid and powder forms, both equally effective. Liquid: ½ gall. 4/-; gall. 7/6; 2 galls. 14/6. Powder: to make 12 galls. 2/-; 25 galls. 3/6; 50 galls. 6/-; 100 galls. 11/6.



Write for descriptive folder and "Guide to Garden Pests," gratis and post free.

Sold by Nurserymen, Seedsmen, Florists, Chemists, Ironmongers and Stores.

Sole proprs. and mnfrs.

Abol Limited, 9, Beltring, Paddock Wood, Kent.



NO NEED TO USE POISONS.

**WEED DEATH****CORRY'S NEW NON-POISONOUS  
WEED KILLER POWDER****KILLS THE ROOTS***Non-Caustic. Harmless to the Use*

Equally as effective, if not more so, than the dangerous arsenical compounds and CHEAPER

Sold in Tins ..	2/-	3/6	6/6	12/-	and in
Sufficient for ..	12½	25	50	100	gallon

THERE NEED BE NO DOUBT AS TO ITS BEING EFFECTIVE



For Peaches, Cucumbers, Carnations Vines, &amp;c.

Kills Red Spiders as effectively as Corry's White Fly Death kills White Fly. *Non-poisonous.*

Wonderful reports received from some of the largest us and growers in Great Britain and the Channel Islands

2/-	3/6	6/-	12/-	19/-	36/-	78/-	150/-
½-pt.	1 pt.	1 qt.	½-gal.	1 gal.	2 gals.	5 gals.	10 gals.

Sold by Nurserymen, Seedsmen and Florists.

CORRY &amp; CO., Shad Thames, London, S.E.

**ROCKRAVEN GARDEN STONE**COMPANY SUPPLY POROUS LIME-  
STONE ROCKS FOR ALPINE SUBJECTS:  
WEATHER-WORN BY THE STORMS  
OF CENTURIES INTO DELIGHTFUL  
POCKETS, LEDGES AND FISSURES.  
" VARIED SHAPES AND SIZES "APPLY: SECRETARY,  
LINTON-IN-CRAVEN, SKIPTON, YORKS**McDOUGALL'S  
PERFECT SAFETY  
WEEDKILLER**

Keeps paths and drives free from unsightly growth.

Being entirely free from poison its use does not involve the slightest danger to children or domestic animals, or any fear of poisoning poultry, game, etc.

Pint tins ...	1/6	1 gall. drums	6/6
Quart " ...	2/6	5 "	25/-
½ gall " ...	4/-	40 " casks	£7/10/-

1 pint Weedkiller to 3 gallons water.

Sold by  
Nurserymen, Seedsmen,  
Ironmongers, etc.

If you have any difficulty in obtaining apply direct to:-

**McDougall & Robertson, Ltd.**  
BERKHAMSTED, Herts.

(formerly of Manchester.)

**BENTLEY'S**

BY APPOINTMENT.

**Compound Quassia Extract***The most effective and economical Insecticide manufactured.**Destroys Aphis, Caterpillar, Mildew and all Insect Pests.*

This non-poisonous wash can be used upon all plants without the slightest risk of injury. Mixes immediately with water; no sediment to impede sprayer or syringe.

**Invaluable for Hops, Roses, Chrysanthemums, etc.**Hundreds of thousands of gallons of plant wash made of this Liquid Extract used yearly for over 40 years. **One Gallon makes 80 gallons ready for use.**

Two wineglassfuls to one bucket of water (2½ gallons).

1 pint, 1/9; 1 quart, 3/-; ½-gall., 5/-; 1 gall., 8/9; 5 galls., 8/6 per gall.; 40 galls., 8/3 per gall. **Carriage paid on 15/- orders and upwards.**

SOLE MANUFACTURERS:

**JOSEPH BENTLEY, Ltd.,** CHEMICAL WORKS, **Barrow-on-Humber, Hull****FOR ROSE ENTHUSIASTS.****Roses, and How to Excel With Them**

By R. V. GIFFARD WOOLLEY.

Illustrated. 2/6. Cloth 3/6.

"COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, London, W.C.2.

**Eureka  
WEED KILLER****Saves Weary Weeding.****Largest Sales. Always satisfactory.**

PRICES (Powder):

Small Tins, make 12½ galls. Weed Killer	£0 1 9 ea.
Medium " " 25 " " " "	0 3 0 "
Large " " 100 " " " "	0 11 0 "
Case to make 200 " " " "	1 1 0 "
" " 300 " " " "	1 10 0 "
" " 500 " " " "	2 2 6 "
" " 1,000 " " " "	3 17 6 "

Also LIQUID, double strength.

SOLD BY AGENTS.

If any difficulty in obtaining, write the only Makers:

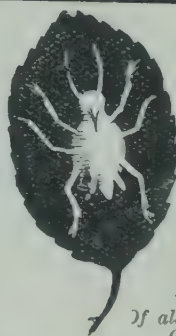
**TOMLINSON & HAYWARD, LTD.,**  
NEWLAND, LINCOLN.**SOIL PESTS  
DESTROYED**

by "ALPHOL"

Sample 14 lb., 3/6 carr. paid

Write for particulars of this and other reliable Garden  
Helps, Lawn Improvers, "Veribest" Seeds, etc., to**Garden Supplies, Ltd., Cranmer St., Liverpool****HERBERT'S GOLD MEDAL PINKS**Acknowledged to be the finest in the World. Unsurpassed for border or pot culture, of robust constitution, free flowering, unique colouring, and delightful fragrance.  
Received Ten Awards of Merit.

Lists Free.

**G. H. HERBERT, Nurseries, Hazelwood  
Road, Acock's Green, BIRMINGHAM****KILL  
GREEN FLY**

By spraying your roses and other plants with

**CIRENGOL**

9d. per tube.

Larger size, 3/-, contains five times the quantity of 9d. tube.

Of all Seedsmen, Ironmongers, and Chemists, or post free from

**THOS. CHRISTY & CO.,**

4-12, Old Swan Lane, London, E.C.4.

**CIRENGOL****THE NEW COMPLETE LIST**

of

**GARDEN  
BOOKS**

published by "Country Life"

is

**NOW READY**FREE ON APPLICATION TO THE PUBLISHERS,  
20, TAVISTOCK ST., COVENT GARDEN, W.C.2



## TULIP NOTES

*Early Tulip De Wet.*—This is an orange—or, perhaps, to be more accurate, a reddish-orange—sport from that fine tulip, Prince of Austria. My first introduction to it was in Amsterdam some years before the war, where it helped to decorate one of the specimen rooms at a large exhibition of women's work. Ever since then I have kept my eye upon it, and for a long time I have had it in my own garden. Familiarity has bred increasing appreciation, and I can now say that anyone who wishes to have one of the most beautiful, one of the sweetest and one of the most friendly of all early tulips in their garden must not forget to order De Wet. The flower is long shaped, and the orange ground of the petals is veined with red, which is more pronounced round the edges than in the centres.

Six days before writing these lines, a visitor pronounced it to be a sport of Prince of Austria by its scent. As to height, it is quite as tall as its sire. Advantage may be taken of this, if an early tulip bed is wanted, to introduce some Cardinal Rampollo, which, while being considerably dwarfer, has much the same colouring. To me a variation in height is more pleasing than a rigid uniformity.

*Early Tulip Standard Silver.*—Before the dawn of the twentieth century more striped varieties of tulips were to be found in our bulb lists than there were in 1924. I made it my business last year to try to get together a few of these old stagers. I wanted to show visitors to my garden what the "mania" tulips were like. They were all what we now

call earlies; and what differentiates them from those with which we are now so familiar (e.g., Yellow Prince, Prince of Austria and Cottage Maid), is that they were all striped. That these were the sort of thing that Petrus Hondius saw grown to excess (as he thought) in his neighbour's gardens there is no doubt. The first half of the seventeenth century was prolific in the production of both coloured and black and white flower pictures. In all of them there is the tell-tale leaf high up on the stem, which tells us they were earlies. Standard Royal Silver, or Standard Silver, or Silver Standard—for it has all these *aliases*—is undoubtedly one of the most beautiful of these striped early flowerers. The way the white and scarlet are combined, and its shapely pointed petals, give a peculiarly smart, well groomed appearance to the blooms. It has its counterpart in scarlet and gold, which is known as Standard Gold, but it is not so effective.

Other ancients are Arms of Leiden, Roi Pepin, Admiral Reinier, Globe de Rigaut and, of the edged type, Lac Bachuijen and Lac van Rijn. This edged type seems to have existed since the beginning of tulips in western Europe. It is distinguished by having some shade of mulberry red blooms with a distinct ivory white or cream edge to the petals. It seems to have been ignored in the eventful mania years 1635–37.

*Mendel Tulips.*—In a note in THE GARDEN a few weeks ago I promised to give my experience with these newcomers in the open ground. One year's trial under glass

commended them as a distinct acquisition. It is the same with those outside. There are most beautiful shades among them, which are quite different from the colourings found among the earlies. I have one called April Queen, which is reminiscent of the pink cottage variety Sir Harry; and another, Early Beauty, a long flower of the softest rose with a little more than a suspicion of orange along the edges of the petals. Oranja and Salmoran are different shades of orange, and so on.

This is, as it were, the second lap. I must now wait and see what sort of an increase there will be when the bulbs are lifted. It makes the whole difference. No, or very poor, increase is more than a wet blanket on a bulb's prospects; it is a veritable extinguisher. Where are all those exquisite varieties that poor Walter Ware staged at the big Tulip Conference in London in May, 1915, and for which he was awarded a certificate of appreciation? Lady Love, perhaps the most charming of them all, practically makes no offsets. I bought a little stock of a very great beauty after the style of Eleanora many years ago, but I have now only a few more than when it first came to Whitewell. A tulip that emulates Peter Pan will find it does not share that person's popularity.

*Tulipa persica* (a small yellow species).—Try this cheap variety as a pot plant in a cold or very cool house. I never thought of such a thing, but twice this year in places wide apart I have seen it done with very satisfactory results.

JOSEPH JACOB.

## CORRESPONDENCE

## WHERE WILL IT END?

SIR,—Why not take a leaf out of the Stud Book and follow in the footsteps of the pedigree stock-breeders? Why name immediately every new hybrid that is born? The first daughter of Mumtaz Mahal will be known for a year or two as Mumtaz Mahal filly, and will not have a name in her own right until registration papers have been taken out for her. A colt or filly may win races long before baptism. A horticultural stud book would be a universal work of reference. The quotation of the stud book number would be sufficient to identify and describe a plant. The *imprimatur* of the stud book would be prized by the hybridist and authoritative to all.—E. E. T.

## BLACK CURRANTS.

SIR,—It is a pity that more people do not know as much about the Baldwin as does Mr. Copley, as evidenced by his letter on page 252 of THE GARDEN; but I should like to elaborate rather than contradict some of his remarks.

Baldwin is, as he states, generally the first of the black currants to bloom, but it actually suffers less from frost both at this time and later, than any other sort I know, so that if late frosts mar the prospects of a crop from the Baldwin, other varieties are still more badly damaged.

In my own opinion, cold winds are the worst enemy of the Baldwin and, indeed, of most black currants at blossoming time; but the shelter of a hedge or a few judiciously placed wattle hurdles is not difficult to provide in a garden and will often be found to work wonders in a bad year.

The blossoms of the Baldwin are so formed that pollination is exceptionally easy, a fact that, I believe, has a good deal to do with its astonishing cropping powers, a great deal of

fertilisation being carried out by wind that would need the help of an insect in other varieties.

I think Mr. Copley rather defames the Baldwin *à propos* of its colour, other things being equal. I cannot recollect having had lower market returns for Baldwin than for other sorts; indeed, it is usually the other way about, owing to the better condition in which it arrives in the market.

I hope that Mr. Copley's opinion that Baldwin will never become really popular is incorrect; the insatiable demand of the jam-maker for Baldwin leads me to think that it is so.—A. H.

## CAMPANULA LANATA.

SIR,—Some months ago, describing wild flowers in a Greek island, I wrote of this campanula as being of a "luminous campanula blue." I see Colonel Enever Todd sets beside this another description of the colour as "white, yellow or purplish." I think the campanula I found really was lanata. I saw it growing at Kew when I returned from Greece. But at Kew the flowers were of a yellowish or whitish colour, like the buds or half-opened flowers as I found them. I mention this in case someone who grows the plant may like to try imitating the conditions of its native habitat. Where I found it the plant grew only in complete shade, in cracks and ledges of vertical limestone cliff. Against the rosy grey of the rock the big Canterbury bell flowers shone with a surprising brilliance.—A. PAINTER.

## ROSA HEMISPHERICA.

SIR,—In a recent article in THE GARDEN the introduction of the old double yellow rose (*Rosa hemisphaerica*) was ascribed to "Celsius," a typographical error for Clusius that one may hope was obvious.

For the story, which Clusius tells in the "Rariorum Plantarum Historia," of his first acquaintance with the rose in a toy garden of cut paper that he saw at Vienna, is well known. But since writing of this rose I find that Joret in "La Rose dans l'Antiquité et au Moyen Age," states that Claude Mollet, in his "Théâtre des Plans et Jardinages," 1563, refers to *R. hemisphaerica* a few years before Clusius published his description of it. I have not had an opportunity of verifying the reference. It is a pity that this fine old rose is rather too tender for most parts of this country, but it is still in cultivation here and I believe that there is an old specimen in a garden near Woking, while at least one of our rose growers lists it in his catalogue.—F. A. H., Chesham Bois.

## VIBURNUM BITCHUENENSE.

SIR,—One of your correspondents stated just lately that *Viburnum bitchuenense* was much superior to *V. Carlesii*, the flowers being larger, and pinker before opening. Messrs. Hillier and Sons of Winchester quote *V. bitchuenense*, and here is their reply to my enquiry: "The above plant (*V. bitchuenense*) is a poor thing, flowers very thin and not showy, and we would think it advisable for you to procure a better variety." Does your correspondent think that either he, or Messrs. Hillier and Sons, have got an incorrectly named variety, or can he have compared the *V. bitchuenense* with the inferior variety of *V. Carlesii*—for I have been told that there are two varieties of this latter plant in commerce, one much inferior to the other as regards size and waxiness of the flowers. I should be glad to know where he procured the *V. bitchuenense*, and if he can throw any light on the matter. *V. Carlesii* is such an exquisite thing that anything superior would be a tremendous acquisition.—A. L. B.



## A BOTANICAL DICTIONARY.

SIR,—Mr. C. F. Gray's suggestion of a dictionary of botanical Latin is a valuable one. As a newcomer among gardeners, I find it very difficult to remember distinguishing Latin terms, because as a general rule I have not the foggiest idea what they mean. So many plants are "paniculata," "rupestris," "pulchellum," "latifolia," "canescens," but not knowing what these terms mean they convey nothing to me. In other words, a great many of us know and use these names purely parrot-fashion and not intelligently. — GWENDOLYN ANLEY, *Woking*.

SIR,—As a regular subscriber to THE GARDEN, may I say how very useful such a botanical dictionary as C. F. Gray, Bourneville, proposes would be to many. In my opinion there should be no illustrations, nothing which would prevent its being bought by any employee, and it should have a clear "Introductory Explanation." Would it be possible to get the Fellows of the Royal Horticultural Society to guarantee a sufficient sum to bring out a book which would be of universal use. I would like to underline the words of the writer, "It should be quite a small pocket volume, also quite small in price." — EDITH W. HUTH, *Wokingham*.

SIR,—I was very interested in reading C. F. Gray's letter dealing with the pronunciation of botanical names. Even such everyday names as cyclamen and schizanthus are seldom pronounced alike. The reason, of course, is very obvious. A boy, when he commences work in a garden, naturally picks up the pronunciation of plant names from the head or under gardeners, and invariably continues to use the pronunciation given to the plants, whether right or wrong. As time goes on he hears plant names pronounced differently and is at a loss to know which is proper. Apart from the confusion this causes, a lot of interest in plants is lost, because, how can a man interest himself in a plant the name of which he is afraid to pronounce? Nothing annoys me more than to come across a plant name I cannot pronounce, which I am sorry to say often does occur. One looks in vain for a pronouncing dictionary of plant names at a price a working gardener can afford to pay. The cultural side of the plant gives the gardener plenty to think about, as climate, soils, etc., play a large part in success or failure, but pronunciation would be the same in all parts, if a Standard Pronouncing Dictionary could be brought out.—F. C. KING, *Milnthorpe*.

## ERYTHRINA CRISTA GALLI.

SIR,—Re Mr. Coutt's remarks on the coral plant, Erythrina Crista-galli, as a suitable plant for the greenhouse, it may be interesting to say that it is practically hardy in Devon and Cornwall if but a covering of cinder-ash or similar material be placed over the rootstock from November to early April. This plant stood out for near half a century to my knowledge at Bicton under a south wall, flowering profusely each year, proving a most interesting plant to all visitors.—J. MAYNE.

## ON MANURES.

SIR,—A very interesting article in THE GARDEN recently discussed the preparation of mixed manures for horticulturists, and favourably mentioned many of the better articles on the market. That discussion was extremely valuable in so far as it gave the opinions of the users of mixed manures. The writer hopes that a few words of "inside information" will not only supplement the general knowledge of the subject of manuring but will also bind consumers and producers in closer ties of friendship and of mutual trust. The writer, with several years of

scientific and practical experience of this subject, would strongly emphasise the fact that one cannot know too much about the type of soil, crops, previous manurial treatment and even climatic conditions in helping an enquirer to obtain the finest possible results. The writer has often given advice on the actual mixing of manures and submitted actual samples. Now, in manuring, the baser or less soluble manures are essential in opening up heavy soils and giving body to light soils, but no one ought to have to pay for base manures which are not available to crops as manures. In other words, only the most finely ground base manures are worth much, and these, in many cases, are extremely valuable. Quick-acting manures are very necessary, but one can imagine the crops rendering small thanks for splendid dinners for a week or two and starvation after a few days of rain. Thus the man who knows his job makes a carefully calculated mixture of both classes of manures, and practical experience invariably supports him. In agriculture the noble progress of the last decade was largely the outcome of the long period and investments of our forefathers in slow-acting manures. To avoid waste of money to the less enquiring men certain principles must be known. Acid soils need lime and alkaline manures where possible. This involves reducing superphosphates or dissolved bones, sulphate of ammonia and natural manures, or substituting bones, basic slag, nitrate of soda, etc. Alkaline soils are rare, but they can stand the above acid manures. We repeatedly find a deficiency of lime in soils submitted, although excess lime is too hungry for manures to be profitable. As to general principles of manuring crops, it may be that, briefly stated, leafy crops desire nitrogen, seeds desire phosphates and starchy crops (bulbs, roots, etc.) potash. But all plants require some of each. Individual crops have marked peculiarities, with the result that the subject is full of pitfalls for the amateur. Manufacturers produce standard mixtures for flowers, fruit, market gardening, and special ones for tomatoes, potatoes, vines, roses, chrysanthemums, lawns, etc., and these, from reliable firms, are excellent and economical.—GEO. WALWORTH, *West Bromwich*.

SUNDRIES  
AT CHELSEA SHOW

(Continued from page 320.)

Messrs. G. Hayward and Co. were exhibiting greenhouses, portable hand-lights and heating apparatus.

The Paramount Furnishing Company had very comfortable garden chairs and also tables to match. These were made of sea grass, which does not creak, has a certain amount of give in it, and is very durable.

A small group of inexpensive garden furniture was exhibited by Messrs. T. Syer and Co.

The words "Say it with flowers" bedecked the stand of the Florists' Telegraph Delivery Association, which has a membership of 3,000 florists in all parts of the world. This Association undertakes to deliver fresh flowers to almost any place at home or abroad, however distant it may be.

The Padworth Industries had some solid and well made garden chairs and seats.

Really good fibrous turf loam is often hard to get, but Mr. A. B. Johnston had samples of good quality loam on his stand.

A general exhibit of sundries was shown by Messrs. R. Melhuish, Limited. Fruit protectors, lawn mowers, tools, syringes and plant foods of all kinds were for sale.

Mr. J. Haws was exhibiting a selection of his famous watering cans.

The Godiva Engineering Company were demonstrating the working of their motor mower and grass edge cutter.

Messrs. George Monro, Limited, the Covent Garden salesmen, had a varied exhibit of sundries. Baskets, china bowls, tools and fertilisers were shown.

The gardening gloves shown and made by Miss A. Everitt should, by their appearance, be very durable.

Messrs. George Fowler Lee and Co., Ltd., were showing fruit and vegetable preserving appliances.

The South Metropolitan Gas Company had an exhibit of sulphate of ammonia, a wood preservative and disinfectants.

The Radium Fertiliser Company were exhibiting their patent fertiliser, with which many people have had good results.

Mr. C. A. Jardine was demonstrating the cutting powers of the super-secauteur which he has invented.

Good quality is the keynote of every implement manufactured by the Wilkinson Sword Company. A large selection of grape scissors, pruning and budding knives, flower scissors and secauteurs were on view at this stand.

A gay and artistic effect was produced by the exhibit of coloured bowls and chairs shown by the London Gardens.

Bird-baths, sundials and garden ornaments in various shapes and designs and made of artificial stone were shown by Messrs. Kelly and Co., Limited.

Messrs. H. Scott and Sons exhibited fertilisers, fruit tree washes, plant stakes, barrows and samples of peat and loam.

All the equipment necessary for successful bee-keeping was exhibited by Messrs. E. H. Taylor, Limited, the bee specialists. A multi-tray cabinet for storing fruit was also shown on this stand.

The New Cross Timber Company had an exhibit of rustic garden furniture, arches, fences, etc.

Messrs. A. Smellie and Co. had several useful and improved implements among their large assortment of sundries.

In a case on the exhibit of Messrs. C. T. Overton and Sons bees were busily working. Hives, combs and all the necessary oddments for bee-keeping were being shown.

Mr. Walter Unwin exhibited garden furniture of rustic design, also loam and leaf-soil.

Mr. William Sinton was showing polished oak plant tubs and vases which were well made. "Citadel" chairs were also shown.

A selection of folding tables was shown by Messrs. Abbott Brothers. These tables are very light, but yet strong.

A collection of hand-made baskets and leather goods was shown by the "Not Forgotten Association." All the goods on this stand were made by disabled soldiers who are still in hospital, many of them being permanently disabled.

Messrs. T. H. Webster and Son were showing to the public labels and the "Cascade" nozzle.

Trucks, ladders of all lengths and wheelbarrows were shown by Mr. H. C. Slingsby.

Lord Roberts' Memorial Workshops had an exhibit of garden furniture, baskets, etc.

Messrs. Holtzapffel and Co., Limited, exhibited garden tools of high quality which were hand forged from the best steel.

Mrs. Torkington was showing garden labels and indelible ink with which to inscribe them.

Messrs. Castle's Shipbreaking Company, Limited, had a good exhibit of garden furniture.

In our report of Mr. Reginald Winder's formal garden at Chelsea Show, an unfortunate printer's error occurred relating to the paragraph dealing with berberis and double-flowered gorse. This paragraph did not refer to Mr. Winder's garden.



# THE GARDEN.

**WATERER'S GOLD MEDAL RHODODEN-**  
DRONS and Azaleas, Rare Hardy Shrubs, Alpine and Perennial  
Plants, Vegetable and Flower Seeds, Outdoor Chrysanthemums,  
Wedding Plants and Dahlias. Catalogues Free.—JOHN WATERER,  
Sons and CRISP, LIMITED, Twyford (Berks.), Bagshot (Surrey),  
and London.

**WAKELEY'S PATENTED HOP MANURE.**  
The original and only substitute for Stable Manure. See  
advert. on back cover.

**WM. DUNCAN TUCKER & SONS, LTD.,**  
Lawrence Road, South Tottenham, N.15.—Conservatories,  
Winter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**BIRDS' BATHS, GARDEN VASES, SUN-**  
ALS, NESTING BOXES. Catalogue (No. 4) free.—  
MORTON, 60, Buckingham Palace Road, S.W.

**TANNED GARDEN NETTING, small mesh,**  
yds. by 1yd., 2s.; 25yds. by 2yds., 4s.; 40yds. by 1yd.,  
3d.; 40yds. by 2yds., 6s. 6d.; 40yds. by 3yds., 9s. 9d.;  
Carriage paid. Compare our netting with others. Lists now  
ready.—GALLOP, Net Manufacturer, Hastings. Telephone: 352.

**WELLS' CATALOGUE OF CHRYSANTHE-**  
MUMS now ready, and will be sent post free on application.—  
WELLS & Co., Merstham, Surrey.

**TENNIS BOUNDARY NETTING, 50 yds. x**  
yds., 20/- Iron Standards, 9 ft., 3/- each. Tennis Nets from  
Sports Lists now ready.—GALLOP, Net Manufacturer,  
Hastings.

**FEY THE BIRDS.**—Rotless Tanned  
NETTING. Small mesh. As supplied by us to the Royal  
Gardens. In two qualities. 50yds. by 1yd., 4/-, 6/9; 2yds.,  
13/6; 3yds., 12/-, 20/3; 4yds., 18/-, 27/-; 25yds. by 8yds.,  
27/- Any size supplied. Carriage paid; approval  
dealer qualities, 3/6 50 yds., measured mesh closed.

**ALVANISED WIRE NETTING.**—Superior  
quality, 50yd. rolls.  
Sh. 1ft. 1ft. 6in. 2ft. 2ft. 6in. 3ft. 4ft. 5ft. 6ft.  
.. 2/10 4/1 5/1 — 7/1 9/5 11/9 14/2  
.. 3/11 5/8 7/2 8/6 9/8 13/- 16/3 19/6  
.. 4/7 6/6 8/3 — 11/6 15/3 19/1 22/11  
.. 6/5 9/2 11/8 14/3 16/7 22/2 27/9 33/3  
.. by 1 1/2 ins., 13/2.

**TENNIS BOUNDARY NETTING.**—Lines top  
and bottom, 25yds. by 2yds., 16/3; 3yds., 18/3; 4yds., 25/3.  
Carriage paid; approval. Standards for fixing to, also playing  
poles and all requisites supplied.

**LAWN MOWERS, 5 Riveted Blades, high**  
wheels, brass bushings, close cutting, highly finished, unequalled  
price, 8in., 25/6; 10in., 27/-; 12in., 29/6. Garden Rollers  
from 37/6.

**SEA NETTING.**—Barked, Extra Strong and  
durable, only 2 1/2 d. square yard. Standards for fixing to.

**ECLIPSE SPRAYER.**—Simplest and Most  
efficient for Insecticides, Limewashing, Disinfectants, Creosoting,  
etc. 31/-. Carriage paid.—E. B. HAWTHORN, LIMITED, Dept.,  
Shrewsbury

**GARDEN NETS.**—Best tanned, small mesh,  
yds. by 1yd., 2/-; 25yds. by 2yds., 4/-; 25yds. by 3yds., 6/-;  
yds. by 4yds., 8/- Carr. Paid. Satisfaction guaranteed.  
Tennis nets from 10/-. Special nets for tennis boundary. Pea  
netting nets. Lists and samples free.—G. JARRETT, Net-  
ter, Rye.

**LAXTON'S STRAWBERRIES AND FRUIT**  
SEEDS.—Our Novelty List for 1925 is now issued, and con-  
tains new Apples, Raspberries, Currants, Strawberries, etc.  
Garden Lovers should have this. Post Free.—LAXTON  
OTHERS, Nurseries, Bedford.

**SWITCH RARE SEEDS.** Catalogue de-  
scribing nearly 3,000 kinds now ready. Free on application to  
MORPSON & MORGAN, London Road, Ipswich.

**BARR'S SEEDS FOR JUNE SOWING.**—  
For VEGETABLE AND FLOWER GARDEN, ROCK  
GARDEN and GREENHOUSE. Finest Selected Strains and  
Tested Growth. Special Lists Free.—BARR & SONS, 11, 12,  
and 13, King Street, Covent Garden, London, W.C.2.

**THE DOUGLAS CLOVES AND BORDER**  
CARNATIONS; glorious scent, stiff stems, and continuous  
flowering. The new crop of seed is now ready to sow. 2s. 6d  
and 5s. per packet. Plant catalogue now ready.—J. DOUGLAS  
(The Premier House for Carnations), Gt. Bookham.

**IRON AND WIRE FENCING FOR GAR-**  
DENS.—Ornamental Iron and Wire work of every description.  
Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue  
G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel  
Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70.  
Ask for separate lists.—BOULTON AND PAUL, LIMITED,  
Norwich.

## CONTENTS.

	PAGE
Leader: Gardeners—III, Women ..	335
Rhododendron racemosum and its Allies ..	336
(Illustrated) ..	338
June Work Among Chrysanthemums (Illus- trated) ..	339
Gardens of Healing—II ..	340
Fragrance in the Summer Garden (Illus- trated) ..	342
Trees Overhanging Gardens ..	343
The Enemies of the Strawberry (Illustrated) ..	344
Notes from Contributors ..	345
Prunus subhirtella autumnalis. (Illus- trated); Clivias; Enothera mar- ginata ..	346
Simple Gardening (Illustrated) ..	346
Naming of New Roses ..	346
Book Reviews ..	346

**VANCOUVER ISLAND and Pacific Coast**  
rare ornamental alpine and lowland plants, bulbs, etc. Only  
those difficult or impossible to obtain in England are offered.  
Plants well packed and despatched at the right time of year  
arrive in good condition. Write for list.—J. BENNETT,  
Lake Hill P.O., Victoria, B.C., Canada.

**CRAZY PAVING.**—Dwarf Walling, Rockery  
Stone direct from quarries. Cheapest and most artistic on  
market.—CLAYTON AND HAMMOND, LIMITED, 53, Baker Street,  
W.1.

**SUNDIALS, BIRD BATHS, VASES.**—In  
Imperishable Reconstructed Stone. Write for catalogue G.2.  
—CLAYTON AND HAMMOND, LIMITED, 53, Baker Street, W.1.

**LOOK! TANNED GARDEN NETS.**—All  
orders despatched same day. 25 yards by 1 yard, 2/-; 25 by 2,  
4/-; 25 by 3, 6/- Odd netting for bushes, 6 lbs. for 2/6. All  
carriage paid. Any sizes supplied. Also Tennis Boundary Nets.  
—MOORE & Co., Net Works, Rye.

**PULLETS, pure breeds, laying, 7/6 each,**  
90/- doz.; Chickens, 1,000, great bargain, month old White  
or Brown Leghorns, Sussex month old, 2/- each, 24/- doz.;  
two month, 3/- each, 36/- doz.; three month, 4/- each, 48/- doz.;  
500 Crossbreeds, same ages, 18/-, 24/-, 38/- doz., carriage paid  
live delivery. List free.—CONTINENTAL FARM, Stratford, Essex.

**LOAM.**—Fibrous Yellow Turf Loam. Illus-  
trated Catalogue Free.—A. B. JOHNSTON, New Park, Cranleigh,  
Surrey.

**FOR 7/- will send post free 4 doz. Schizostylis**  
coccinea, 6 Libertia bicolor.—HANBURY, Inverewe, Poolewe.

**MANURES.** The most complete little book  
on the subject is "The Manual of Manures," by H. VENDELMANS.  
4/5; by post, 4/9. Published at the Offices of "COUNTRY  
LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## SUTTON'S PANSIES.

The popularity of these beautiful flowers has, in recent years,  
been greatly extended by many rich and varied colours produced  
in our strains.

### SUTTON'S PERFECTION.

The finest strain of Pansy in cultivation. The variations  
in colour and marking of these flowers are most delightful.  
Per packet 5/-, 2/6, and 1/6.

SUTTON & SONS, THE KING'S SEEDSMEN, READING.

**DOBBIE'S PLANT CATALOGUE** now ready.  
Free to all readers. Please mention THE GARDEN when  
writing.—DOBBIE & Co., LTD., Edinburgh.

**CHEAP GOVERNMENT WIRE !!!** Great  
for training fruit trees, peas, beans, hops, arches, greenhouses,  
tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-  
stranded and waterproof covered. Several thicknesses from  
19/6 per mile (full 1,760yds.). Small lots quoted. Postcard  
to-day for free samples and list of 300 bargains.—GREEN'S  
GOVERNMENT STORES, 69, Albert Street, Lytham.

**HERRING NETS** to protect all kinds of fruit,  
etc., approximately 100 ft. by 30 ft., 11/6 each, carr. paid. No  
second profits. Cash with order.—WM. G. GRIGOR, Port Gordon  
Station, Banffshire.

**GARDEN NETTING.**—Best selected, small  
mesh, tanned, 25 by 4 yds., 8/-, or 8 yds., 16/-. Carriage paid.  
Tennis Nets and Standards. List free.—STRAWBERRY NETTING  
Co., 5, Suffolk Terrace, Lowestoft.

**FULL OF WISE SAWS AND MODERN**  
Instances our catalogue offers all that is brightest and best  
for the present day garden. The choice plant at Sixpence a  
time may be often sought, but it is seldom obtained. You can  
get it from us. Catalogue free.—FEILDEN AND CROUCH, 2,  
Fairseat Nurseries, Wrotham, Kent.

**NEW ZEALAND PLANTS** for Seaside  
Gardens.—Pittosporum nigrescens for hedges, pot grown  
plants for planting, now 18/- per doz. Olearia Macrodonia,  
1 1/2 ft., 12/- doz., splendid for hedges. Olearia Haasti, 1 ft.,  
12/- per doz. Brachyglottis repanda, 2/6 and 3/6 each.  
Clematis indivisa, 2/6 each. Ozothamnus, 2/6 each. Muhlen-  
beckia complexa, 1/6 each.—TRESEDER & Co., The Nurseries,  
Truro.

**SEWAGE DISPOSAL FOR COUNTRY**  
HOUSES.—No emptying of cesspools; a perfect fertiliser;  
no solids; no open filters; perfectly automatic; everything  
underground. State particulars.—WILLIAM BEATTIE, 8, Lower  
Grosvenor Place, Westminster.

**PRIMULA AND ALPINE SEEDS** from  
choice (1,500) collection. Rare Seedlings and Rockery Bulbs.  
Lists free.—Rev. J. F. ANDERSON, Glenn Hall, Leicester.

**"LOOK!" STOUT NETS** for Tennis Court  
Bordering, lined top and bottom, 30yds. long 2 yds. wide, 16/-;  
30yds. by 3yds., 22/-; 30yds. by 4yds., 30/-. Standards for  
same (wooden) 10ft. high, 3/- each. All carr. paid.—COUSSENS  
& Co., Tennis Net Works, Rye.

**GARDEN NETS, tanned, small mesh, for**  
Peas, Seeds, and Strawberry protection. 30yds. long, 2yds.  
wide, 4/6; 30yds. by 3yds., 7/-; 30yds. by 4yds., 9/-; 30yds.  
by 5yds., 11/6; 30yds. by 6yds., 14/-. Carr. paid.—ALFRED  
ROBINSON, Garden Net Works, Rye.

**JAMES BACKHOUSE, F.L.S., F.R.H.S.,** for  
many years chairman of the late firm of James Backhouse and  
Son, Limited, having retired from York, offers his services as  
Garden Consultant. 30 years' experience, specially in connec-  
tion with Alpine and Herbaceous Plants. Advice given for  
Rock Garden construction and planting, also for permanent  
Flower Borders, boundary Plantations, etc. Address for terms  
to CAER FEGLA, Arthog, North Wales.

**GREENHOUSE PAINTING AND GLAZING.**  
—"Vitrolite," superior to White Lead Paint, 18/6 per gallon,  
cans extra. "Plastine," the Imperishable Putty, 32/- per cwt.,  
kegs extra; 7lb. tins., 4/- post free; 14lb. tins., 5/6, each, carriage  
extra, tins free.—Full particulars from W. CARSON & SONS,  
Grove Works, Battersea S.W.11



## CARNATIONS for Garden & Greenhouse

### PERPETUAL FLOWERING (Greenhouse) Varieties



We carry large stocks—rigidly selected—of all the best varieties. For immediate flower we offer fine plants in 6" pots in bud. Young stock, ex 3 1/2" pots, stopped and broken, to pot along, or plant, ready now.

All Collections are carr. and packing paid for cash.

6 plants in variety	6" pots	ex 3 1/2" pots
12	24/-	8/6
25	45/-	16/-
25	80/-	30/-

### ALLWOODII (Half Pink, half Carnation)

New and delightful self colours have been introduced in the ever popular Allwoodii—the hardy plant which grows and flowers in every garden and window-box. The collections quoted below are exceptional value, and include many quite new and unique varieties.

6 plants in variety, 6/6 12 plants in variety, 12/-  
25 plants in variety, 22/6

### HARDY PERPETUAL BORDER CARNATIONS

Will eventually supersede the old Border type, being hardier, freer flowering, carrying bolder and more sweetly perfumed flowers. A much wider range of colour is now obtainable, and the following collections are first-class value, embracing many of the later kinds.

All plants ex 3 1/2" pots—immediate delivery.

6 plants in variety, 15/- 12 plants in variety, 27/6

CATALOGUE of all CARNATIONS POST FREE on REQUEST but order the above collections at once for prompt delivery, and exceptional value.

The leading  
Carnation Raisers  
and Specialists  
in the World.

*Allwood Bros*

Dept. 4, Haywards Heath, Sussex.

## TRY 'FERRY' FIRST INSECTICIDES

Keep your flowers, vegetables and trees perfectly clean and healthy with the famous "Ferry" Insecticide. Non-poisonous, reliable and economical. 1 gal. 7/6; 2 gals. 14/-; 5 gals. 33/- Carriage paid, for cash with order, to nearest Railway Station in England and Wales. **SEND YOUR ORDER TO-DAY.**



THE BRITON FERRY CHEMICAL & MANURE  
CO., LTD., Briton Ferry, South Wales (Est. 1886)

## WATER LILIES WATER LILIES WATER LILIES

WRITE FOR CATALOGUE.

Eighty different varieties listed, in a wonderful range of colours. Other Aquatics and Bog Plants a speciality.

ADVICE GIVEN FREE.

**G. REUTHE,**  
Keston Nurseries, KENT.



## Don't Waste Your GARDEN RUBBISH!

THE ADCO PROCESS  
(Patented in the United Kingdom and Abroad)  
WILL TURN IT INTO

## SYNTHETIC FARMYARD MANURE

ADCO is your garden's "Crop Insurance Policy." It maintains soil fertility at a "low premium" by guaranteeing a supply of organic fertiliser. As refuse accumulates treat it with

### ADCO ACCELERATOR

if at least half consists of soft green materials such as lawn cuttings, cabbage leaves or green weeds; but when dead leaves, vegetable stalks, herbaceous border cuttings, prunings, straw and straw packing, form the bulk of the heap, use **Standard ADCO**.

If your dealer does not stock ADCO write direct to us, mentioning his name and nearest Goods Station.

1 cwt. of ADCO makes from two to three tons of manure according to the class of rubbish treated.

ADCO Accelerator .. 28 lb. 4/6, 56 lb. 8/-, 1 cwt. 15/-  
Standard ADCO .. 28 lb. 6/- 56 lb. 11/6 1 cwt. 20/-  
Carriage paid to nearest station. Cash with order.

ADCO, Ltd.



40, HARPENDEN.

## Notes from Maidstone.

### IRISES.

Gold Medal, Chelsea, 1925  
Gold Medal, Chelsea, 1922  
Gold Medal, R.H.S., 1924  
Silver-Gilt Medal, Chelsea, 1923.

Silver Cup, Chelsea, 1924

Looking back we find that we were receiving Awards for Iris so long ago as 1895, but the above are some of those recently made for our Famous Iris and give an idea of the high standard of our collection. However, a far better way of appreciating this is to visit our Nurseries, where the Iris may be seen in full bloom and the great variety and vigour of our plants will be their own recommendation.

We should be glad if intending visitors would advise us so that we can arrange for an Iris expert to be present. Our Catalogue containing all the best varieties will be sent post free.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.

# Abol

## Aids to a Perfect Garden

Abol Specialities are used and recommended by experts. They are always reliable, economical and safe, and are now recognised as standard horticultural requisites.

### Abol Non-poisonous Insecticide

A sure-kill for Green Fly, American Blight and other insects. Without equal as a remedy for mildew on Roses, etc. Used in the Royal Gardens. 1/2 pt. 1/4; pt. 2/2; qt. 3/4; 1/2 gall. 5/3; gall. 9/6.

### Abol Patent Syringes

Give a perfect spray which may be varied from fine to medium or coarse, as desired. Specially recommended by the National Rose Society. Last a lifetime.

No. 4 (1 x 14), 16/4; No. 5 (1 x 20), 21/-; No. 6 (1 1/2 x 20), 26/- Bend extra, 1/6

### Abol White Fly Compound

A safe remedy for White Fly on Tomatoes and Cucumbers. Economical and easy to apply. Simply pour down centre path of the house at 2 1/2 fluid ozs. to 1,000 cubic feet. From 1/2 pt. 1/- to gall. 15/- Postage extra.

### Abol Special Manures

For Roses, Sweet Peas, Chrysanthemums, Tomatoes, Potatoes, and Hop Manure; also Abol Horticultural all-round Fertilizer.

### Abol Weed Killer (Poison)

An extremely reliable and economical preparation, which entirely eradicates weeds from garden paths and walks, carriage drives, etc. In liquid and powder forms, both equally effective. Liquid: 1/2 gall. 4/-; gall. 7/6; 2 galls. 14/6. Powder: to make 12 galls. 2/-; 25 galls. 3/6; 50 galls. 6/-; 100 galls. 11/6.



Write for descriptive folder and "Guide to Garden Pests," gratis and post free.

Sold by Nurserymen, Seedsmen, Florists, Chemists, Ironmongers and Stores.

Sole proprs. and mfrs.

Abol Limited, 9, Beltring, Paddock Wood, Kent.





VOL. LXXXIX.—No. 2795.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
 Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
 Entered as Second-class Matter at the New York, N.Y., Post Office.

JUNE 13, 1925

## GARDENERS: III—WOMEN

FOR centuries the British Isles has been famous, not only for its gardens, but also for the gardeners it produces.

Thus has been evolved a craft that has an immense tradition behind, with its consequent feeling of *esprit de corps*. All famous gardens have been man made, and it is only within the past few years that women have seriously taken up gardening. Quite apart from the manual work attached to horticulture, many of the great qualities of our gardeners in the past have been attained because they have been trained in big gardens, where they have been through the mill in every kind of gardening. Their entire training has been practical. It is true that those who have learned something of the theoretical side of the subject have probably risen higher than the man with no theoretical background, but anything of the theory of gardening that they may possess has been learnt on their own initiative.

The woman who wishes to take up gardening for a living starts with this great handicap, that she has never been through the mill in a great private garden. For obvious reasons it is difficult for a woman to obtain the necessary early training in a private situation, so she has had to fall back either on a nursery or on a horticultural college. In a nursery she will probably learn only one branch of horticulture, and however skilled she may be in this branch, she will lack a general horticultural education. In a horticultural college there is too much theory and too little practice. Far be it from me to belittle the excellent training given by these colleges, but their very nature makes it difficult for them to complete what they have started. Most of them take in pupils who to begin with do not know a cabbage from a watercress. Owing to the numbers of students a great deal of the teaching has to be by rule of thumb, and individual effort counts for little. A course may take one or two or three years, and so a definite period has to be set aside in which to learn propagation, and another planting, and so on. In fact, it is teaching gardening by time-table: gardening, a trade where time counts for nothing and the longer a man lives the more he finds he has to learn.

This applies both to male and female students, but the female is the more handicapped, for a male can always begin or finish his training in a garden, which a woman cannot always do. The consequence of this rush of learning is that women know either too much or too little of gardening. Theoretically they often know more than a man-gardener; in practice it is the opposite. This handicap is a great pity, for in some garden work they are far superior to men. Wherever neatness of handiwork is re-

quired, such as in pricking off seedlings, they are pre-eminently superior. They are usually more tidy than a man and they have more imagination and so are frequently better designers of a garden or arrangers of colour schemes. But these assets do not make a thorough gardener and so their present utility in a garden is limited. The great blessing of gardening as a profession is its never ending variety, but if you are limited to one particular job, because you are expert at it alone, this makes even the pleasantest occupation become purely mechanical in time.

Unless some scheme can be devised by which a woman can get a general groundwork for at least a year *before* entering college, I see no great future for women as professional gardeners.

Apart from the professional side, there are thousands of women who have taken up gardening as a hobby. Many of them have become extremely proficient gardeners, but the majority of them are only interested in the result. They leave the why and the wherefore of a plant's growth to a male relation or to their gardener and so are extremely ignorant about the fundamentals of gardening. They can talk glibly about the beauty of this or that, but if you ask them if it is propagated by division or cuttings or layers, they either make a guess or look at you in blank amazement. But even they possess certain qualities in which they excel. They frequently have that undefinable factor, an "eye" for a plant. Their judgment is frequently superior to that of a man, if they can keep their keenness in check; they almost always have a better idea of colour and of the general planning of a garden.

Although it is difficult to find a man and a woman who can run a garden in perfect harmony, yet there is little doubt that intelligent team work makes the best gardens. Each possesses something which the other lacks, and so, theoretically, co-operation should achieve the best results. E. H. M. C.

### AMONG OTHER ARTICLES IN OUR NEXT ISSUE WILL BE:

CURRENT WORK IN THE HERBACEOUS BORDER, by R. V. G. Woolley.

THE CANADIAN KEW, by George Simpson.

MY ROCK WALL, by Edward Cahen.



# RHODODENDRON RACEMOSUM & ITS ALLIES

BY H. F. TAGG.

IN THIS ARTICLE THE CHIEF CHARACTERISTICS OF A FEW MEMBERS IN A CLOSE CYCLE OF RELATIONSHIP ARE CLEARLY DESCRIBED, AND IT SHOULD PROVE OF ASSISTANCE TO THOSE WHO ARE IN DIFFICULTIES OVER POINTS OF NOMENCLATURE.

THE explorations of Mr. George Forrest and Mr. Kingdon Ward have added to cultivation three species of *Rhododendron* which, like *R. racemosum*, bear freely, in April, fascicles of small rose-coloured or white and pink-tinted flowers.

The three species are: *R. mollicomum*, Balf. f. et. W. W. Sm.; *R. pubescens*, Balf. f. et Forrest; and *R. hemitrichotum*, Balf. f. et Forrest.

*R. racemosum* has been in cultivation for some thirty years and as it is easily propagated, it is now fairly common in gardens. Discovered by Delavay in 1882, it was first raised from seed in Paris in 1889. In 1892 it was introduced to cultivation in Britain by Messrs. Veitch. Forrest gathered it in 1904 in Yunnan and it was thus one of the earlier re-introductions of Yunnan *Rhododendrons* made by that explorer. It was also collected in western Szechuan, where it is rare, by Wilson, in 1908. Since 1904 numerous gatherings have been made by Forrest and Ward in Yunnan, some of which appear to be better garden plants than that originally introduced.

*R. mollicomum* was found by Forrest in 1913-14 on the mountain slopes of the Chungtien Plateau and north-east of the Yangtze Bend. There are specimens in the Herbarium of the Edinburgh Royal Botanic Garden of plants which flowered at Caerhays Castle in 1922, raised from Forrest's seed under the type number Forrest 10347. This is the earliest record I have of its flowering in this country, but it is very probable that Forrest's No. 10347 flowered in cultivation at an earlier date.

In 1921 Mr. Kingdon Ward gathered three specimens, to which he gave the numbers 3952, 3952A, 3953. The herbarium specimens are respectively *R. racemosum*, *R. mollicomum*, and *R. pubescens*. These were gathered east of the Yangtze Bend and the serial sequence of the numbers suggests that the plants were growing close together. From seed sown under the number 3952 there have been raised both *R. mollicomum* and *R. pubescens*, and from 3952A, *R. pubescens*.

*R. pubescens* flowered last year at Headfort Gardens, Kells, Co. Meath; this year at Tower Court, Ascot, at Edinburgh, and at Caerhays Castle, Cornwall, under the number Ward 3952. The species was first found by Forrest in 1918 on the slopes of the Muli Mountains (Forrest, No. 16812).

*R. hemitrichotum* was found by Forrest in 1918 (Forrest, No. 16250), on the slopes of the Muli Mountains, and in 1921 Ward gathered it under the numbers 4050 and 4994. I have no record of it having flowered in cultivation until this year, when, under the Forrest type number, it flowered at Caerhays Castle, and under the Ward numbers quoted, it flowered at Tower Court and at Edinburgh. It should be noted that not all the plants growing under the quoted Ward numbers are typical *R. hemitrichotum*. Some appear to be forms of *R. racemosum*.

Features common to the four species are: Shrubs freely branched, twiggy and of scrub habit, with small leaves, pubescent, hairy or waxy below. Flowering buds, each bearing fascicles of two to four flowers, borne in the axils of foliage leaves on the upper parts of the shoots. Flowers small, with short tube (long in *R. mollicomum*), lobes five, lepidote outside and hairy within at the throat of the tube. Stamens ten, puberulous to hairy at base. Peltate scales present on stem, leaf (upper and under surfaces), pedicel, calyx, corolla and ovary.

Characters which distinguish typical plants of the species are:

(a) Species with leaves grey-white below.

1.—*R. racemosum*.—Leaves elliptic, oval or obovate, about 1½ ins. long, ¾ in. broad. Leaf upper surface not puberulous in typical forms. Calyx lobes not ciliate. Ovary lepidote, not puberulous.

2.—*R. hemitrichotum*.—Leaves narrowly oblong or lanceolate, about ¾ in. long, ¼ in. broad. Leaf upper surface densely and persistently puberulous with short, soft

white hairs. Calyx lobes ciliate. Ovary lepidote and puberulous all over.

(b) Species with leaves pale green below, puberulous or bristly.

3.—*R. mollicomum*.—Leaves narrowly oblong or oblong-obovate, about 1 in. long, ¼ in. broad, puberulous above and below, not bristly. Calyx crateriform, lepidote and puberulous, not ciliate. Corolla oblique, tube slightly curved, longer than the lobes. Style puberulous at the base for about one third of its length.

4.—*R. pubescens*.—Leaves narrowly oblong-lanceolate, about 1 in. long, ¼ in. broad, pilose and bristly above and below. Calyx setulose-ciliate at the margin. Corolla-tube not longer than the lobes. Style glabrous.

In *R. racemosum* and *R. hemitrichotum* the leaf under surface is covered with minute wax-covered pegs. These give to the under surface the grey-white colour. In both species hairs are absent from the under surface, but peltate scales are present, sunk in small pits in the epidermis. In *R. hemitrichotum* the young stem, pedicel and the upper surface of the leaf is clothed with short soft white hairs. These are absent in typical *R. racemosum*, but there are forms that are more or less puberulous on stem and leaf upper surface. The leaf shape and size are distinctive in typical forms, but in cultivation there are forms intermediate between *R. racemosum* and *R. hemitrichotum*. They may be hybrids. Typically the ovary of *R. racemosum* is covered with scales, but hairs are absent. In the forms with puberulous foliage, hairs may be present on the upper part of the lepidote ovary.

*R. mollicomum* has a soft, puberulous hairiness on the leaf upper surface and on the under surface also. A wax covering is absent and from *R. hemitrichotum* it is distinguished also by the absence from the latter of hairs on the underside of the leaf. *R. mollicomum* is distinct from the other three species in its bilateral corolla, with relatively long tube. In the other species the corolla tube is wide and short and the flowers are almost regular. Moreover, the style, glabrous in *R. hemitrichotum* and *R. pubescens*, is conspicuously hairy at the base in *R. mollicomum*.

The leaves of *R. pubescens* are clothed above and below with soft, short hairs, and with longer bristle-like hairs also. The presence of the latter on foliage and stems distinguishes this species from the other three. From *R. mollicomum*, its nearest ally, it is distinguished also by its glabrous style and ciliate calyx. On the type plants the leaves are about 1 in. long, lanceolate or oblanceolate, but young plants in cultivation show variation in the size and shape of the foliage, generally speaking the leaves are larger and may be as much as 1½ ins. long. The flower colour and to some extent the flower shape of this species, convey a suggestion of "apple blossom" on a small scale.

All are essentially scrub plants from open areas, although odd gatherings of each have been made in thicket or open forest. As they come from the same areas as *R. racemosum* it is probable that cultural treatment that suits *R. racemosum* will suit the others also, and it will most likely be found that, as with *R. racemosum*, the best effects in gardens will be got when plants are grown in clumps or masses. Indeed, there are few species of the genus, of shrub or bush habit, that do not lend themselves to this treatment with happy results.

The species here described should make excellent rock garden plants grouped on sites suitable for small shrubs. I think, also, that they will be found suitable for banks and slopes where other forms of the genus fail for want of soil moisture. This is a speculation only. We know too little about them in cultivation to be able to indicate with any certainty the conditions that will suit them best, but it can be said with certainty that they are all xerophytes. They have those morphological features which we generally associate



with conditions of physical or physiological drought. The narrow leaves with thick cuticle and hairy, scaly and waxy covering, and the tendency of the leaf margin to curl over and protect the lower transpiration surface, are adaptations which impede loss of water from the leaf surfaces. Such adaptations are characteristic of plants growing in dry situations, and where atmospheric factors tend to dry the plants quickly. They are also found in plants growing in situations where soil factors render the quick uptake of water by the roots difficult, although the soil may not be physically dry. These conditions are met with on unretentive soils—sandy, gravelly or stony—and on peaty moors, where, in spite of a physical wetness, absorption of water by the plant is difficult owing to the presence of humus acids. The wet peat, to the plant, is physiologically dry.

In this connection it is interesting to note what collectors say about the situations in which their various gatherings of specimens were made.

For *R. hemitrichotum* we are given by Forrest such situations as "open rocky pasture," "dry open meadows and rocky slopes," "dry rocky slopes amongst scrub," "open

As already explained, peaty bogs are physiologically dry. This occurrence of *R. racemosum* on such physically diverse soils as "dry stony situations" and "peaty bogs," has a parallel in the distribution of some of our native heaths. Some species of *Erica* and *Calluna vulgaris* are essentially moorland and peat-soil denizens in the north and west, but in the south and south-east the same species occur on dry, gravelly or sandy "heaths" and in dry patches in open mixed woodland.

Other *Rhododendrons* related to the four here discussed are: *R. spiciferum*, *R. scabrifolium*, *R. virgatum* and *R. oleifolium*.

*R. spiciferum* is a near relative of *R. pubescens* and may be regarded as the southern representative of the latter species. It comes from the district of Yunnan-fu. *R. spiciferum* is a more asperous plant than *R. pubescens*. In many features it is an intermediate species between the narrow leaved, bristly, but not asperous *R. pubescens*, and the much broader-leaved plant, *R. scabrifolium*, with its marked foliar asperities.

*R. virgatum* comes from Sikkim and Bhutan. *R. oleifolium* is the Chinese representative of *R. virgatum*. It should



#### A CLOSE ALLIANCE.

(From left to right): probably *Rhododendron pubescens*, 3952A, Ward. *R. pubescens*, 3952, Ward. *R. racemosum*.

thickets." Ward says of his 4050, "In dry oak forest on steep slopes, much better and flowers more freely as a small shrub (1ft. to 2ft.) on open sheltered slopes in the scrub belt."

*R. mollicomum* has been gathered "in open scrub," "in open situations among scrub," "on margins of pine forest," "in open thickets in dry situations," "on dry slopes."

*R. pubescens* was gathered by Forrest "in thickets amongst scrub," and "amongst scrub on dry rocky slopes."

*R. racemosum* in its many forms has been gathered in more diverse situations. We have it from areas with field notes, such as "open scrub," "open dry stony situations," "open situations on downs," "open mountain pastures," etc. As with the other three species it has been gathered in the more open forest formations, such as "mixed open oak and pine forests" and "open situations on the margins of pine forest." *R. racemosum* is recorded also from "open boggy situations" and "peaty boggy ground in open situations."

be noted here that in cultivation there are forms of *R. racemosum*, raised, I believe, from Wilson's seed, passing under the name *R. oleifolium*. They are not that species as described by Franchet. I assume that those writers who refer to *R. oleifolium* as hardly to be distinguished from *R. racemosum*, have in mind some of these forms of *R. racemosum* growing under the name *R. oleifolium*. True *R. oleifolium* is distinct from *R. racemosum*.

The name *R. sino-virgatum* was provisionally suggested by the late Sir Isaac Bayley Balfour for Forrest's early gatherings of *R. oleifolium*. This was before he had seen the type of *R. oleifolium*. After he had seen it he recognised that Forrest's gatherings were the same species as Franchet's *R. oleifolium*. The name *R. sino-virgatum* was never published, but by correspondence and the exchange of plants the name has got into use in some gardens. Plants in cultivation under the name are *R. oleifolium*, Franch.



# JUNE WORK AMONG CHRYSANTHEMUMS

THIS ARTICLE, FULL OF CULTURAL DETAILS, COMES AS A TIMELY REMINDER TO THOSE WHO WISH TO SUCCEED WITH "CHRYSANTHS" IN THE AUTUMN MONTHS

**W**HETHER the purpose in view is to furnish the greenhouse or conservatory, to enter the competitive arena of the November shows, or to ensure a bountiful supply of decorative flowers for cutting, June is an important as well as a busy month for the chrysanthemum grower. The plants are outside, not necessarily because the weather is so glorious that they will thoroughly enjoy every hour of night and day, but because, however rough the wind may be, however dreary the wet day, cruel the hailstorm or chilly the damp night air, the time of the year has come when a glass roof overhead will work havoc with chrysanthemums, drawing up the stems like attenuated rubber tubing, softening the foliage and then scorching it during the first hour of sunshine, and encouraging the rapid development of gnawing and sucking pests and fungoid diseases. Yet there are chrysanthemums to be found under glass in pits, and even in greenhouses, while the month of June drops its days one by one; it happens thus every year, and every year some chrysanthemums which ought to have been lusty, robust plants struggle through a painful, sickly existence.

## SUMMER QUARTERS.

Southern growers may have got a good many plants into their flowering pots by June, but even so it is unwise to have them so early in their summer quarters; they should be given a brief spell under the shelter of the cosiest wall or, at any rate, in some place where winds do not punish them. By mid-June, however, it should, in all but notoriously rough quarters, be the aim to get the plants well out in the open, still contriving by some means to ward off the harsher winds, by the erection of a temporary screen if no permanent wind-break exists. Bear in mind that, generally speaking, it is not north winds that trouble British gardens in the summer months. In many cases, a garden that is well protected on the northern side suffers a great deal from strong south-westerly winds in summer.

Chrysanthemums must have air, light and sun, but they do not want roasting in July and August by standing on the southern side of a roft. brick wall.

It is unwise doggedly to determine to get all plants into flowering pots by a certain date. All varieties do not grow alike, and late struck cuttings are obviously not ready for final potting so early as those rooted in January and February. More harm than good will accrue from prematurely potting a plant in a roin. pot which has not comfortably filled its 6in. pot, for the large body of soil does not, as novices are prone to imagine, encourage rapid growth. Of course, it is equally unwise to leave a plant to become badly pot-bound in any intermediary stage. Southerners can start potting about the end of May and finish by the end of June, while Northern growers should commence and finish ten days or a fortnight later. Plants for mid-winter decoration or cutting may be potted all through July.

## STAKING.

Plants should be staked with at least one permanent full-sized stake as soon as potted up. Subsidiary stakes may be inserted round the edge of the pot at a later date, but the

first main stake should be close to the main stem of the plant, and it is bad policy to begin with a 2ft. stick and then have to substitute it finally with a stout 5ft. or 6ft. cane, for such a task can rarely be accomplished without injury to roots or foliage, and frequently means limbs of brittle plants being broken.

Never be satisfied with one tie, but be liberal with raffia, so long as the ties are neatly placed and hidden by foliage. The raffia should be strong, and should first be tightly tied to the stake and then looped round the stem. Take care that the point of contact is midway between two leaf-joints, not resting upon an axil. Draw the ends of the loop until the raffia just touches the stem, then tie the knot. Allow no stem to be drawn from its natural position, and, above all, do not wind raffia round a stem to prevent its swelling in a natural manner.

Where a broad path runs north and south through a garden, the chrysanthemums may be placed in a single row along the side of the path. Allow all the room possible between the plants, and, at any rate, do not permit the foliage of one plant to touch another. The pots should stand on two battens with space between to admit of the free passage of water from the drainage holes and to prevent worms gaining access to the root-run. Some method must be adopted to prevent plants being blown over, and probably the best plan will be to run a taut, strong cable wire the whole length of the row, strained to firm uprights driven well into the ground and stayed at the foot. The tops of the stakes can be tied to this wire, and the plants will be safe. Circumstances do not always conform to our most ardent desires, and it may be necessary to run more

than one row of plants, and these from east to west instead of north to south. So make the best of what cannot be avoided: and that will be done by keeping the rows as wide apart as possible, and placing the dwarf plants on the southern side, so that they are not shaded by the taller ones.

## WATERING.

There may be nothing new to tell about watering, but there are a few points that, apparently, require eternal reiteration—they are so perpetually disregarded. A roin. pot should have almost 2ins. of water-space to enable the whole body of soil to be moistened properly. If it can possibly be avoided, do not water with fresh-drawn tap water; even a few hours' exposure to sun in a broad, open-topped tank is of appreciable benefit. Whenever a plant has become so dry that the edges of the soil part from the pot, the plant ought at once to be freed from the supporting wire and immersed for half an hour in a

tank. This is laborious work, but no other method is fully satisfactory. Some growers are immensely fond of daily overhead syringing: it certainly is a means of keeping the foliage clean, but it undoubtedly softens both foliage and stems, and that is not good for the plants. When plants get smothered with dust, a drenching sufficiently forceful to clean the leaves is necessary, but the water used should be tepid—indeed, almost warm. Apart from such a necessity, it is preferable to rely upon flooding the standing-ground on hot evenings, and occasionally to spray with an insecticide.



A WONDERFUL PLANT FOR A FIVE-INCH POT.



## PESTS AND DISEASES.

Pests and diseases must have no peace. A nicotine wash is most effective as an insecticide, and sulphide of potassium is the best all-round fungicide for the rusts and mildews that worry unhealthy chrysanthemums; but bear in mind that the presence of fungus on chrysanthemums is evidence of erratic culture. Admittedly a few varieties are inherently susceptible to disease; they are the weaklings of the tribe, and are only tolerated because of exceptional beauty of their flowers. These, however, are not varieties for novices, but rather for experts who have little need of tuition.

## FEEDING.

The common and usually common-sense maxim in regard to feeding plants is: Do not begin until buds are set; and some quite good growers adhere to this principle with chrysanthemums. There are two points, however, in regard to these particular plants which must not be lost sight of, especially by the exhibitor. A chrysanthemum makes a great deal of very substantial growth before it sets buds, and the plants have to be watered so frequently and so liberally that whatever nourishment there may be in the soil becomes excessively diluted, and to a considerable extent washed away through the drainage. Therefore the stems and foliage require nourishment, for without sturdy stems and big leathery leaves well built blooms are unobtainable.

The nature of the feeding in the early stages should differ from the later diet. Sulphate of potash is an excellent chemical food for stimulating strong, substantial foliage. Sulphate of ammonia and nitrate of soda both induce soft, flabby growth. Their only real utility is to give a fillip to a laggard plant, but the potash builds solid substance in leaf and stem. Soot water improves colour in the leaves; it is a moot point whether it really does more than that, but even this is useful, especially where some check has caused a pale, starved appearance in the leaves. Sheep manure is good for early feeding in liquid form, and it is better to ring the changes between the three than to begin with and adhere to any one kind of food. Weak and often is the golden rule in feeding. After buds are set a good proprietary chrysanthemum fertiliser should become the

staple diet, still with an occasional change to a liquid animal manure.

## PINCHING.

The exhibitor will have completed his "stopping" by the time this article appears in print, for April and May sees most of this work finished, although for mid-winter flowering a good deal later will be the time for final stopping. Pinching, however, is a task which must be carried out throughout the summer,



WELL-GROWN PLANTS OF CHRYSANTHEMUM SIR EDWARD LETCHWORTH.

as it involves not only reducing the "breaks" which are to be carried on, but pinching all the tiny young growths which break from the axils of the leaves, and which only inflict heavy labour upon the plant to supply them with nourishment that the important growths require. The proper method is to do a little pinching every day, never allowing a useless growth to become too strong to be cleanly removed by pressure of the thumbnail. Be always careful not to break or spoil a main leaf, for every one of these has its own functions to perform for the benefit of the plant. Disbudding is another matter, but belongs to a later period than this article is intended to cover.

A. J. MACSELF.

## GARDENS OF HEALING.—II

## THE FOUR FLOWERS.

**A**MONG the many common plants whose healing properties are universally recognised in France there are four which are especially sought after. These are known as *Les Quatre Fleurs*. They are Papaver Rhœas, Verbascum Thapsus, Malva sylvestris and Viola tricolor. The petals and other parts of these plants are employed separately as medicines, but they are more usually mixed in equal quantities and used as *La Tisane des Quatre Fleurs*.

**PAPAVER RHŒAS** (the common red poppy; Fr. Coquelicot).—The narcotic properties of the poppy family are well known to everyone. They exist in the essences of the petals, which must be dried *very rapidly* and stored in a dry place. Opium is extracted from Papaver somniferum and should, of course, be only administered by professional people under doctors' orders; but an infusion of the capsules of P. Rhœas (three or four to a pint of milk) induces calm, refreshing sleep and quickly soothes toothache or

neuralgia if applied *externally*. This is done by steeping a piece of flannel in the infusion until it is soaked and then wrapping it round the patient's head. This is applied to tiny children in France to induce natural sleep, and in cases of acute bronchitis, lung trouble and whooping cough a dose of infused poppy petals is given under doctor's orders. Dried poppy petals cost from 25 to 30 francs a kilo in France. The plants are very plentiful, but it takes a long time to collect a kilo of petals.

**VERBASCUM THAPSUS** (great mullein; Fr. Bouillon blanc) is still much used in some country districts in Britain. It is the plant *par excellence* for chest complaints, an ointment being made from its flowers which is undoubtedly of great value. On the Continent it has a great repute, not only for the above maladies, but also as a cure for all rheumatic and gouty disorders. For this purpose the root of the mullein is dried and cut into rounds, which are made into a decoction which is taken three times a day. A

gentle laxative and a blood purifier is made from the flowers of this plant. Its leaves boiled in milk are used in France to cure phlebitis and to heal cuts and burns.

Verbascum Thapsus is a magnificent plant, and 1½ yds. should be allowed between the plants for the full development of the branches. The flowers should be gathered and dried *in the sunshine* and handled as little as possible. They must be stored in a dry place.

**MALVA SYLVESTRIS** (common mallow; Fr. mauve).—The seed vessels of the common mallow are wholesome and allay irritation owing to the mucilage they contain. This "stickiness" is what make them so beloved of English and French children as "cheeses," or *petits fromageons*. The whole plant cures colds and coughs and produces expectoration. For colic and internal complaints the soothing properties of its leaves are used. An infusion of these is a sovereign remedy for dysentery not only on the Continent, but also in Egypt, where it



grows abundantly and where in Arab houses the whole plant is highly prized as a vegetable and is cooked like spinach. To allay irritation in rash diseases or to stop tickling in the throat an infusion of mallow leaves is used. Poultices made from the fresh root are applied to boils and gatherings, and a *very* hot one quickly relieves the pain of violent gout.

*VIOLA TRICOLOR* (pansy).—"Tisane des Pensées" is a popular and much-used

remedy in France for all skin diseases. For several weeks a cupful is taken three times a day. Dried pansy leaves reduced to powder are put in the food of French infants who are inclined to eczema. The fresh leaves are a laxative and when dried are used to allay feverishness from whatever causes it arises. Pansy roots reduced to powder are beneficial for emetic purposes.

The petals of these four plants mixed in equal quantities form a household medicine in France which can be safely given to anyone. It is laxative, soothing, a blood purifier (hence it is anti-rheumatic), a preventive of coughs and colds, and allays feverishness. It is easily made at home, and is an absolutely safe remedy. It is astonishing that so efficacious a medicine is unknown in England.

VICTORIA SLADE.

## FRAGRANCE IN THE SUMMER GARDEN

SUMMER with its increasing light and heat is so full of flower perfume that when one begins to consider it, the impression is apt to be rather a medley, but a little more leisure will suffice to disentangle this and one of the first things to emerge is the garden pink. Would that we could cull afresh one's first impression of this generous flower. That one might once again gather and inhale one's first breath of this inimitable perfume. That, alas! is beyond our powers, but we may renew the pleasure annually and, having renewed it, retain it for many weeks by growing as wide a range as possible of the varied species and varieties that possess this gift. The pink is a plant that has fluctuated in popular favour and recent years have seen many remarkable fresh developments, but, when one casts back to forgotten years, one discovers variety after variety, now lost to cultivation.

Old volumes of the *Botanical Magazine* will reveal some astonishing mathematically marked and coloured varieties, and one cannot but help wishing that once again these might come to life and reveal whether they too were notable for distinct perfume. It is certain, however, that our present day varieties are not lacking in this respect and, right up from the lowliest of alpine forms, such as fragrans, to the lordly carnation itself, we may follow a perfumed pathway of tremendous attraction. And what magnificent garden plants they are too! How generously and gorgeously they flower with an inimitable wealth of colour and a habit that leaves nothing to be desired, while even in the depth of winter they still furnish a splendid touch of colour by reason of their evergreen and ever-grey leafage.

Everyone who seeks perfume in his or her garden will be certain to make the most of the old-fashioned deep red

clove carnation, probably the sweetest of all and the most powerful too, but July and August provide such a welter of their gorgeous blooms in such a variety of colours that it is almost impossible to particularise. Of course they have rivals,



A FINE BORDER OF JUNE-FLOWERING IRISES.



PEONIES ARE INVALUABLE IN THE SUMMER GARDEN.

and the mention of the word "lily" will focus the attention upon another race of plants that are famous throughout the world for the vigour and distinction of their perfume. All through the summer days, from the time when the first bloom of candidum expands, right up to those cooling autumn evenings when the latest blooms of speciosum are flourishing, a procession of delightfully perfumed lilies is with us, though this probably reaches the zenith of its power in August when the wonderful auratum is carrying its immense head of giant blooms. This is essentially an outdoor flower, for, if it is cut and brought into the house, the strength of the odour is apt to prove overpowering, but, in the open air, diluted by the warm atmosphere, one's sense of smell is pleasantly tickled.

Earlier in the season the place occupied by the lily in late summer is filled by the iris, and all through May and part of June the garden that is planted with a rich store of these is painted with vivid splotches of colour, some notable for the rich depth of their brilliance, others æsthetic in their quaintness, while others are just simple delicate tones that blend and harmonise with anything and everything. It is a wise gardener, indeed, who places his chief reliance on these "selfs," leavened by a few of the more unusual and striking kinds. Almost all irises have the grace of perfume, a remark that is true both of the tuberous and bulbous rooted forms. Among the latter the Spanish varieties are pre-eminent, and one would be hard



put to it to make choice of a more beautiful race for extensive planting. They are useful alike in the large or small garden; it is only a question of adjusting the scale of one's plantings to suit the area at command, while the colour range renders it easy to choose varieties which are suitable for every conceivable requirement.

Mention has been made of the germanica section as particularly fragrant and, to these, we may add all the pallida class, while a similar label may be attached to *I. florentina*. The flowers of this are white slightly tinged with blue; while the falls are distinctly marked by a bright golden beard. *I. Monnieri* is very distinct, with handsomely formed bright golden flowers that are powerfully scented. Among the lesser known iris is *sambucina*, a very vigorous grower, running to 3½ ft. The flowers are yellow with brownish-violet rays and veins, and a bright yellow beard, the whole strongly perfumed after the manner of the elder blossom. An old-fashioned flower, that looks like recapturing some measure of its former popularity, is the rocket. This in its best and double form rather resembles the stock, with white or deep purple flowers in early summer. These double varieties are readily increased by means of cuttings, though it will sometimes be found possible to divide older plants. *Cedronella cana* is worth noting as an aromatic plant that is quite effective in the borders and bears crimson purple flowers.

In late summer and autumn, the herbaceous phloxes make a display that for sheer gorgeous effect cannot be equalled, while they fill all the air with a perceptible perfume that becomes stronger and stronger as the sun becomes hotter. Indoors, where they are used as cut flowers, one is indeed aware of this, while the fragrance never becomes so strong as to be unpleasant. Especially choice for well drained and well sheltered borders are the crinums, a bold genus of lily-like plants with handsome deep green strap-like foliage and large umbels of pink or white flowers which are deliciously fragrant. These flowers are funnel-shaped and widely expanded at the mouth and no fears need be entertained as to their hardiness, over the southern half of England at any rate, while, farther north, a covering of straw is sufficient to ensure their safety on all but the coldest soils.

One does not meet the libertias so often as one could wish, but they are grand summer flowers and possess a fragrance that is all their own. There are two varieties, the dwarf and the tall, *L. magellanica* and *L. ixoides*. The former does not exceed 18 ins. in height, with pure white flowers arranged in heads and packed very closely together; the latter somewhat resembles an iris in habit, reaching a height of 3 ft. or 4 ft. with heads of white flowers which are made more conspicuous by the mass of yellow stamens at the centre. The dwarf variety is much the better of the two and provides excellent material for cutting. For broad edgings, *Calamintha alpina* is a splendid subject that is useful in every way. Not only is the whole plant aromatic, but it forms a close mat of leafage and bears charming sprays of violet flowers that are in evidence through almost the entire summer. One of its chief points is that it provides an ideal setting for other flowers, a fact that is strikingly emphasised by associating with sweet williams. The soft hues of the *calamintha* serve to emphasise the glory and brilliance of the heads of sweet william and one procures, too, a combination of perfumes, the aromatic qualities of the *calamintha* with the sweetness of the sweet william heads.

Verbenas are another glory of the summer garden, and, both on the score of perfume and brilliant show, it would be

very difficult indeed to discover anything that would outclass these. They are so easy to manage, too, and a mixed packet of seed, given the treatment accorded to half hardy annuals, will give you such a splendid return that your love for their



FOR WELL-SHELTERED CORNERS THE CRINUMS WITH THEIR HANDSOME FOLIAGE AND CLUSTERS OF WHITISH TO PINK FLOWERS ARE ESPECIALLY SUITABLE.



VERBENAS HAVE A CHARM ALL THEIR OWN IN THE SUMMER GARDEN.

special fragrance is likely to deepen and you will repeat the sowing year after year. Among the commoner plants, *Centranthus ruber* is a sturdy specimen that will begin to flower early and continue late, indeed, it is seldom that one will go to the plants during the summer months and fail to find a lavish display of the honey-scented reddish sprays that are so effective. This is just the plant for out-of-the-way places where the soil is shallow or poor in quality, for, where found as a wilding, it is generally on the steep face of a cliff, railway banks or some other similar position, and no one would be likely to complain of its flowering under these conditions.

Peonies vie with the rose in deliciously delicate fragrance, while the best varieties are not one whit inferior in the charm and delicacy of their petal formation. This is a flower that



conquers all who love a garden, whether their love originates in admiration of beauty of form or of colour, fragrance or daintiness or any other charm that flowers can provide. Passing from their splendid size and handsome leafage to the most modest flowers, do not let us forget the violet—grown entirely outdoors and allowed to flower just when it will. By all means have your frames for winter supplies, cover some plants with a handlight, if you wish, but do not omit some well grown clumps of the finer kinds, tucked in here and there in the general borders and allowed to peep forth their delicious double and single flowers, as and when they will. It is astonishing at what varied seasons they will do this, as though to serve as a reminder that other days and other seasons are coming or have passed. In winter they are heralds of the coming spring. In summer they are lovely waifs, born out of due season and therefore commanding our respect. In autumn they are a reminder that even the fairest may be deceived and that like conditions may provoke a response when things are not what they seem. In spring they are just their own true delightful selves, brimming over with the message that now, indeed, has new life returned to the sleeping earth. Upon only one point must one be careful with these outdoor grown plants, they must be well watered and syringed or red spider will seize upon and utterly ruin them during the heat of July and August.

Another important family of plants for the lover of fragrant flowers is that of the lupins. These have provided us with many a startling surprise of recent years, so that our old friends, the typical blue and white forms (that, it must be admitted), used to shed their unopened buds rather badly, seem a very long way away. But it is quite one thing to add or mix colours and quite another to produce scent, though this is what has happened in the case of the Six Hills hybrids. These have

every shade of colour that the most inventive mind could imagine, as well as a perfume that carries for some distance round the plants.

*Dictamnus fraxinella* makes a double appeal, for not only does the plant exude a strongly perfumed resinous oil and therefore come within the scope of our present thoughts, but it is also a very showy border plant. The height reached is between 1ft. and 2ft., so that it must not be placed too far back in the border, while it flowers in early summer in long terminal spikes of light purple flowers. It is sometimes called the Burning Bush from the fact that if a match is struck near the plant in the evening of a hot day, the gaseous vapour will take fire, but it seems to be a fact that, in this country, at any rate, we do not get sufficient warmth for this to be possible. Apart from that, however, it is a useful and showy plant that makes a great display on the margin of the shrubbery; there is also a white variety. *Monarda didyma*—Cambridge Scarlet—is worthy of high praise, both for its whorls of scarlet flower which make such a brilliant show in the garden and also its distinctive honey-like perfume that is not too powerful. It will literally "grow anywhere," but merits good soil, as this enables it to reach its fullest stature and thus make the most imposing display.

One must, however, conclude somewhere, and this already lengthy note may be brought to a fitting conclusion by mention of *Malva moschata*, the musk mallow. In this instance it is the leaves that are responsible for the famous musk odour. It loves a well drained and chalky soil and, when happy, reaches a height of 2½ft. The flower spikes, which appear in summer, are pale rose coloured and very showy, for the individual flowers of which it is composed often measure nearly 2ins. across.

H. W. CANNING-WRIGHT.

## TREES OVERHANGING GARDENS

### LOPPING RIGHTS AND RESPONSIBILITIES.

#### ADJOINING OWNERS AND OCCUPIERS

THE lopping of overhanging trees belonging to adjoining owners and occupiers is a subject upon which many words have been spoken and many friendships broken. To the most peaceable of neighbours the question has been, and no doubt will continue to be, a frequent cause of irritation and trouble. The ordinary individual knows little or nothing of the actual law in these matters, and, if acquainted with one side of the subject, fails to understand another, so that any step taken is as likely to be the wrong as the right one.

#### AN APPLE TREE CASE.

This was clearly demonstrated quite lately. The Plaintiff had his apple trees growing within a few feet of the boundary running between his own land and the property of the Defendant. These trees bore a popular class of apple, and the branches of the trees overhung the Defendant's land, to his great annoyance apparently, for he maintained that he was justified in taking action. But the Defendant claimed that not only could he lop off the offending branches, which he, in fact, did, but that he was further entitled to pick off the apples growing on these branches, and this he also proceeded to do. The quantity thus picked ran into some bushels, which the Defendant subsequently sold. The Plaintiff then started proceedings against him for conversion, in the County Court. The judge of that Court held that, while a nuisance may be removed, a person is not entitled in appropriating and converting to his own use or benefit that which

caused the nuisance, and judgment was, therefore, given in favour of the Plaintiff.

#### THE HIGHEST AUTHORITY.

But the Defendant was not satisfied with this decision of law and appealed against the finding. From the judgment given in the case in the High Court some useful object lessons are to be gathered, if the important points which are relevant are carefully taken into account. Some sides of the whole question were, in fact, closely examined a good many years ago by our highest legal tribunal—the House of Lords. In the case then considered some rather large and old trees overhung the Respondent's land and had so done for more than twenty years. The Respondent gave no notice to the Appellant, and did not trespass on his property, but he cut off a number of the branches to the boundary line. It is an accepted principle of the law that a person shall not go upon the land of another to remove a nuisance, unless it be a matter of necessity, until he has taken the step of giving the other person reasonable and proper notice. The reason of this is that such an act is an interference with the soil of that other person, and this amounts to a trespass in the eyes of the law. It is true that this was a point which did not primarily emerge from the House of Lords case, where the leading question was whether or not a notice was necessary before the overhanging branches were removed. But the House of Lords decision is valuable because it settled the law that such a notice was not required. The House of

Lords, however, had the further question before them as to whether or not the Appellant had acquired any right which arose from the length of time the trees had overhung the Respondent's soil. Their opinion on this point was that it was impossible to say that the Appellant had acquired a right to the land over which the trees were hanging, or to their overhanging, either under the Statute of Limitations or under the ordinary law of prescription. The House of Lords took the view that if a person can manage to get rid of the interference or encroachment of overhanging branches, without committing a trespass upon his neighbour's land, or entering upon it, this act clearly can be done, and that the right can be asserted whenever it is deemed proper to exercise it, while no notice or previous communication is required in such a case. But the question was not considered, for the purposes of a decision, whether this rule was one which would necessarily apply to the cases of trees so young that the owner might remove them intact, if he chose to lift them, or to shrubs capable of being transplanted, although it was recognised that this question was worthy of examination. In the case of recent date, already mentioned, this well established case in the House of Lords was, of course, referred to.

#### DECISION IN RECENT CASE.

In the recent case, if it had depended upon the nuisance created by the overhanging branches, the Defendant was obviously entitled to abate this nuisance, but his right was restricted to this. It



went no further, in this particular instance, and did not justify him in appropriating to himself either the offending branches when cut off, or the fruit which was on them. This was the Plaintiff's property before being severed, and the High Court held that it remained so afterwards. In deciding for the Plaintiff the Court took the view that he had the right to possession of his

property, but did not indicate the means by which they thought the Plaintiff, in such a case, could have properly enforced this right, if the Defendant had, in fact, merely severed the branches and done nothing more. But the Defendant had appropriated the property to his own use by selling it, and consequently conversion arose. Had he simply cut down the branches it would appear,

however, that the Plaintiff could have recovered his property by proper legal proceedings, if delivery, upon request, had been refused. As it was, the Plaintiff was entitled to the value of the property. It may be added that the Court considered the same principle applied to apples which might have fallen, or have been blown off, when they were on the Defendant's land.

A LAWYER.

## THE ENEMIES OF THE STRAWBERRY

**O**WING to their habit of growth, strawberries are peculiarly exposed to the attacks of the various hungry enemies living in and upon the soil beneath them, as well as to damage from such foes as invade fruit trees and bushes.

Slugs, millipedes, eelworms, wireworms, and other grubs, as well as surface caterpillars, attack root, leaf and stem. Mice and frogs can approach the fruit without difficulty, while from above it is equally discernible to birds and other winged assailants. Even the flower suffers from the epicurean tastes of one marauder—the beautiful rose chafer, whose grub thrives upon the roots.

It is well if these same roots are at first numerous and healthy; for the grubs of the cockchafer, rose chafer, click beetle (better known as the true wireworm) and crane fly (leather jacket), as well as the millipede or false wireworm, will one and all find a satisfactory living upon them should these pests reach their vicinity.

Hence; if any manure or earth has to be added to the strawberry bed, it is advisable to make sure that it is free from injurious creatures—by such methods as frequent turning to expose it to the researches of the birds, the admixture of nitrate of soda and soot to make it unhealthy for intruders, or watering with a solution of salt for the same purpose.

The grubs of the cockchafer and rose chafer are much alike, the principal difference being that the rose chafer grub has a brown spot on each side of the segment or ring next its head.

Both of these grubs feed upon strawberry roots. They are peculiar in shape, having a tough-skinned body, the tail end of which is permanently bent underneath it. The eggs are laid in clusters in summer, in earth or old manure heaps, and are best dealt with by digging, followed by hand-picking or birds.

The cockchafer is a heavy-looking insect with brown corrugated wings,

thin in proportion to its length. It has six very small legs and is orange in tint. It is supposed by gardeners to feed on almost every kind of root, with the exception of mustard, which it cannot tolerate and which is sometimes grown and dug into the earth as a preventive against its mischievous practices. It lives from three to five years in the larval stage, then pupates and hatches into a click beetle, so called from the noise made in recovering its feet after having fallen on its back.

The millipede, or false wireworm, is not an insect and does not change its form, except to become longer and larger. Its legs are very numerous and look like hairs and it may be known by these and by its habit of coiling like a watch spring when touched.

The body of the leather jacket is softer, with a tough skin of dull brownish grey. It feeds on the roots of grass and other plants in a very destructive fashion. The eggs are laid in summer and early autumn, hatching in a couple of weeks to the grubs, which feed till the next spring or beginning of summer, when they pupate.

From June onward the pupæ, one by one, work themselves partly out of the ground and hatch into the crane that fly, we know so well as "Daddy-long-legs." As the grubs thrive in wet soil, infected areas should be well drained and, when possible, thoroughly dug over, when starlings and other birds will generally search out the grubs very thoroughly.

In dealing with grubs and millipedes the surrounding soil should be dressed with something harmless to the plant whose health is in question, and injurious to the foes likely to attack it. Among these remedies lime, or nitrate of soda, and soot may be used with care, or land may be prepared for planting by using stronger applications. If large quantities of Vaporite be used some months must elapse before planting is safe.

The leaves of the strawberry suffer from the onslaughts of a variety of foes. Among these slugs are very prominent. The habits of these unassuming but voracious pests are largely nocturnal and a good addition to any remedial measures will be to examine the beds after night-fall, with the help of a torch, and the accompaniment of a pail of insecticide wherein to drop the bodies of the intruders. Soot and lime left on the surface round and between the plants are most useful, but the straw which is placed between the rows before the fruiting season forms a dangerous harbourage for these little foes and one difficult to keep free from them.

The strawberry snail (*Helix rufescens*), is another insidious enemy which also feeds upon the iris and violet and may infect the strawberry from such sources. The egg of *rufescens* should be sought in late autumn and may probably be found beneath the surface of the soil.

Many strawberry leaves are dappled with brown spots, which are the work of the fungus *Sphærella fragaria*. In mild attacks this does not greatly affect the fruit-bearing capacity of the plant, but in the autumn it is better to clear away all dead leaves, cutting off those affected; also to examine



LEAF SPOTS CAUSED BY *SPHÆRELLA FRAGARIA*.

the plants in spring to see that they are practically clear.

For strawberry mildew (*Sphærotheca castagnei Humuli*), which is white and attacks the under surface of the leaves, causing them to curl, a fungicide should be applied before the fruit is formed, if the condition be recognised early enough, both to save the possibility of the fungus attacking the fruit and to guard against any danger from poisonous applications.

Sulphide of potassium in the proportion of about two teaspoonfuls of the powder to a gallon of water is a useful fungicide needing careful mixing, using a small quantity of water at first, with the remainder added by degrees or the powder may float on the surface.

Leaf and stem are sometimes infested by eelworms of several species which injure the health of the plant, and sometimes cause the disease known as "cauliflower," a thickening and amalgamation of stem, leaf and flower, only to be met by consignment to the fire of the plant (or at least the part) affected. The length of the eelworm is but a twenty-fifth of an inch or under; its presence being judged by abnormal growth of leaf or flower buds. The infection for this pest is from the soil and remedies are the same as for grubs.

The blossoms of all outdoor fruit undergo some uncertainty as to whether they will be able to escape accident and damage from frost, but some, the strawberry among them, are subject to another mischance, the ravages of certain insects which have acquired a taste for their stamens. The rose chafer acts as a burglar to the strawberry blossom, robbing it of the anthers



THE LARVA AND ADULT OF THE ROSE CHAFER.

two species of which are well known as the May bug or June bee.

The rose chafer is a handsome beetle, green above and copper coloured beneath, with a pinkish tinge. Its grub measures about 1½ ins.

The wireworm is a grub of a different calibre. As its name denotes, it is of a wiry appearance,



on which its fertilisation depends, and leaving its fructification to chance and the roving bee.

The fruit itself is eagerly sought by birds, but very largely to allay their thirst. If owners of strawberry beds will have flower-pot saucers filled with water constantly renewed, placed either among the fruiting plants, or very near them and plainly to be seen, they will find it makes a very great difference to the loss of fruit

through birds, as it is often thirst and not hunger which occasions their depredations.

Mice are troublesome sometimes, but chiefly in eating off the achenes, or seeds, which decorate the outside of the fruit. Cats and traps are, naturally, the remedies for such raids; but, unfortunately, the ground beetle *Harpalus* has the same habit and is not so easily dealt with. For it, jars may be sunk in the earth and filled

with sugared water in which a few small pieces of meat are floating. It should, however, be remembered that the ground beetle lives on caterpillars and other insects and so should not be disturbed unless really troublesome.

If the plants are not properly supplied with straw, millipedes may attack the fruit, eat out a hollow, and curl themselves inside, a most objectionable proceeding. M. L. BROOKE.

## NOTES FROM CONTRIBUTORS

### PRUNUS SUBHIRTELLA AUTUMNALIS

A VERY delightful and perfectly hardy plant is the so-called autumn-flowering cherry, with its wealth of pink, semi-double flowers. As a rule it is a much branched bush anywhere from 8ft. to 15ft. tall, with slender, ascending, wide-spreading branches; occasionally it is a small tree. In the park at the old eighth century capital of Nara in

where the accompanying photograph was taken in the spring of 1914.—E. H. WILSON, *Arnold Arboretum, Harvard University*.

### CLIVIAS.

THESE evergreen flowering plants appear to be increasing in popularity every year, and, like the *vallota*, this is probably due to the fact that when not in bloom they

are very charming. Where it is desired to increase the stock of *clivias*, it is best done, I find, by off-shoots or division—more readily, indeed, than by the slow method of raising plants from seed, hence the advisability not to permit plants to become conglomerated at the roots, which spells trouble sooner or later.—W. LINDERS LEA.

### ŒNOTHERA MARGINATA.

NOMINALLY an easy plant to cultivate, there is yet a wonderful diversity of experience respecting this inexpressibly beautiful flower. It has ways of its own, foibles we are apt to call them, but it is far from easy to discover what they are and how to humour them. Some appear to experience no difficulty with the plant, others find it short-lived; some think it easy in its demands, and others are of opinion that it is rather too delicate for our climatic conditions. But *Œ. marginata* is such a lovely flower and has such transcendent attractions that there are few who see it who are not eager to possess it.

What the end may be it is difficult to tell, even if the most approved methods are followed in its treatment. The writer has known many plants of this exquisite Evening Primrose in many gardens, and has grown not a few himself, but, in the long run, he has come to the conclusion that it is not usually a long-liver unless it can be left greatly to its own devices and allowed to send out its suckers to find "fresh fields and pastures new," and thus keep itself vigorous and robust. When such giants among plantsmen as the late Mr. Reginald Farrer have written it down as "delicate," one may venture to say this much at least. The finest plant I ever had was growing at the base of a sunny part of the rock garden, and was bounded on the south-west by a very narrow gravel path. This plant flourished admirably and flowered well for some years, and then started to send out suckers to the other side of the narrow path. This seemed to afford an excellent opportunity for propagation, so the suckers were taken off and planted in pots. The following spring the old plant had disappeared, dying, probably, from exhaustion. The methods of propagation, by means of the suckers and cuttings, are quite good; but if the former plan is accompanied by the loss of a fine mature plant, one cannot but regret the result. A good plant is of rare beauty, with its handsome leaves, its low, trailing growth and its wondrous, lustrous white flowers of great size and marvellous charm. The blooms open in the afternoon with virgin purity and gradually change in colour, remaining open all night and appearing in the morning a delicate rose colour, but shorn of their loveliness of the evening before. Undoubtedly, a light, sandy soil is best for this delightful evening primrose, and I consider that it should be made rather firm and that some porous stones should be about its roots as well.

A flower of such gracious beauty is well worth any effort to cultivate successfully, and even its possession for a year or two will leave a fragrant memory which will linger with us for many years.—S. ARNOTT.



A DOUBLE FLOWERED CHERRY FROM JAPAN.

Japan I have a note of a tree 20ft. tall, with spreading branches and a well developed trunk 2ft. in girth, which in the early days of December, 1914, was gay with flowers. But the plant does not always flower in the autumn. Sometimes it flowers in the spring, and is then called in Japan the *Yaye-higan*—that is, the double-flowered spring cherry. The more usual name applied to it, however, *Jugatsu-zakura*, which means the tenth month (October) flowering cherry. From what I learned from Japanese horticulturists, it is apparent that when this cherry is well covered with flowers in the spring the flowers are few in the autumn and *vice versa*. It is evidently a very precocious plant that does not obey the ordinary rules as applied to flowering seasons. With its elegant habit and wealth of charming pink blossoms it is truly a delightful plant. Since its own flowers are semi-double the autumn cherry rarely produces fruit, but it may be propagated from cuttings and also by grafting on seedlings of the rosebud cherry (*Prunus subhirtella pendula*).

A comparatively recent comer to Western gardens, it has been long cultivated in Japan,

possess a certain value for indoor decoration. Those who grow *clivias* know very well that they are not over particular as to quality of soil, but they do best when treated in a generous fashion, and, given a compost of fibrous loam and leaf-mould with charcoal added, they will go—and are often allowed to go—years without being re-potted. It is unwise, however, not to shift them occasionally, as if left too long separation, or division of the roots, becomes well nigh impossible. With the advent of February they commence to grow and bloom, and from May onwards until early autumn, it is scarcely possible to give them too much water. *Clivias* will give a good account of themselves in any temperate house, and really require nothing in the way of heat, beyond being kept from frost. The first flowers, which usually open early in February, are paler in colour than those which appear a month or so later, the reason being that sun has an effect on the intensity of tint in subsequent blossoms. Of the three species—*nobilis*, *Gardeni* and *miniata*—the last seems to be still as popular as any; certainly it is more often seen, but we have numerous hybrids, some of which



# SIMPLE GARDENING

## COLD FRAMES IN SUMMER.

THESE may be regarded as miniature greenhouses by those persons interested in plants generally but who do not possess a real greenhouse. Those who enjoy the latter usually make good use of the garden frame too. The cold frame may be looked upon as the feeder of the greenhouse, as the small streams are protected which act as feeders of our canals. Personally, I always enjoy growing such plants as primulas, cyclamen, cinerarias and calceolarias in a frame or frames placed to face due north during the summer months. For the benefit of these and other plants that like cool conditions, a nice bed of old, clean ashes is essential. When a cold frame faces due north with the high back to the south, there is not the same need for shading as when the frame faces south. The plants really have more light in the north aspect because the glass lights need not be heavily shaded on the hottest days. Now, as to placing the plants in the frames. The calceolarias should be right at the back, where least sunshine penetrates, but all the other kinds should be equally disposed in rows from front to back—to the calceolarias if the latter are grown. If plants are not grown, then some vegetables and salads may be cultivated, the foremost being frame cucumbers. A novice should try a few plants of ridge cucumbers in a cold frame, as it is wonderful how well they succeed in it. Make a narrow pit along the front of a frame, inside, fill with good compost, firm it and plant several tomatoes, training them to long stakes 1ft. from the ground. Very good crops may be grown. Fill the cold frames in summer. Do not allow them to remain empty and, probably, harbouring weeds.

## OVERCROWDING PLANTS: OVER-CROPPING FRUITS.

We often err in leaving too many plants in pots, pans or borders, or too many fruits on the branches, because we have them and do not like to lose any. This happens even when we know that the results will be unsatisfactory. A noted grape-grower, in long ago days, said he could never bring himself to the decision to thin out adequately both bunches and berries without a struggle with his feelings. "The best thing to do," he said, "is to bring in one of the labourers and tell him to cut out so many bunches, and then leave him to the task," but even this course required courage, which he did not possess. Probably annuals are left by us generally in the most overcrowded state of any plants in our gardens. Sweet peas, culinary peas, beans and root crops come a close second. If we thin out while the plants are small, we do the right thing and rarely miss them, whereas if they are left to form a jungle, we do not know which are the best to leave, and the best of them at this advanced stage are poor, rendered so by undue overcrowding. In our greenhouse we may have two hundred plants,

but there is, really, only proper space for one hundred, which, if given fair play, would make the bravest display in the end. The properly thinned bunch of grapes looks rather a poor specimen, but in a month's time it is splendid. It is not often that we trouble about thinning out our hardy fruits, but it sometimes proves very beneficial. We should, when reducing numbers, realise in our minds what the fully grown specimens should be like.

## PROPAGATING DOUBLE-FLOWERED PRIMULAS.

The Chinese double-flowered variety is still grown in many gardens where pure white flowers are required over a long period for nosegays in winter and spring, and pyramids of snowy blossom, rising from a cushion-like base, are appreciated in the warm greenhouse.



But I find that numerous new cultivators are at a loss as to how they should treat the old plants when the flowering stage is past—in June. Seeds are not sown, but layers are rooted almost after the way of layers of border carnations. The old plants should be placed in a cold frame on a bed of ashes, preferably in a frame facing due north, or in one on the north side of a wall or fence. Sufficient water should be given just to maintain the freshness of the leaves, not more. Very carefully clear away any faded basal leaf-stalks and weeds. Then mix sandy loam, leaf-soil and sand in equal quantities and fill up the pot with the compost, piling it high enough to bury the base of the side shoots and lower part of the parent plant. Do not destroy any side shoots at the base when cleaning old plants. Cover the new soil with green moss and

maintain the latter in a moist state. When the side shoots possess roots, detach them and pot into small pots, then shift to larger ones in due course, adding a little dried cow-dung to the compost. The letters *a*, *a*, point to the young basal side shoots; *b*, rooted side shoot; dotted line *c*, depth to pot.

## AUBRIETIAS, PRIMROSES, VIOLAS.

The aubrietias have, in particular, been very beautiful this year and delighted the hearts of rock gardeners especially. Some amateur cultivators think the only means of increasing the number of plants is by division or the insertion of cuttings. Of course, the neat division of nice fresh clumps is a good way, and succeeds, but seeds may also be sown now and a good batch of healthy young plants secured in time for planting in due season. The aubrietia will grow in any rockery position, but best in one facing south, east or west, although the colours of flowers in northern aspects are generally very deep. The seeds should be sown in pans or pots in preference to boxes, filled with a good open compost. Although the plants will grow in any ordinary garden soil, for the benefit of the seedlings I like to add some tiny lumps of old mortar and some pounded bricks, also old ones. The drainage should be sound, as the young plants do not thrive in a sour soil. The seeds are small, so it is advisable to prepare a level, smooth surface, to scatter the seeds thinly and barely cover them, but press the surface a little to embed them into the soil. Cover with glass and paper and keep the seed vessel out of the direct rays of the sun for a time. Primrose seeds should be sown just the same as those of the polyanthus, and the resultant seedlings should be transplanted at an early stage in a cool, prepared bed. At this season I like such beds better than dry boxes. We all know how lovely violas are, especially those of choice strains. It is to these I now refer. Turn an ordinary garden frame towards the north, make up a nice bed of loam in it, sow the seeds thinly in shallow drills and do not shade, let in all the north light and treat the young plants well. **GEORGE GARNER.**

**Presentation to the Rt. Hon. Sir Herbert Maxwell.**—At a dinner given in honour of Sir Herbert Maxwell, Lord Lieutenant of Wigtownshire, at Newton Stewart, on the 16th ult., the occasion was taken to offer him tokens of esteem and affectionate regard from every corner of Galloway. As our readers know, it is given to few gardeners to "ruminate in print," so gracefully, and withal to such practical effect, as Sir Herbert Maxwell. His writings are the outcome of a gardening experience extending over more than half a century, and though the climate of his ancestral home on the shores of Luce Bay is so mild and humid as to enable Sir Herbert to grow many sub-tropical plants, denied to less fortunate folk, the latter can seldom read what Sir Herbert has to say about his garden and the many friends in it without deriving therefrom something of practical instruction as well as much refreshment for the mind.



## NAMING OF NEW ROSES

[The following has been sent in by a correspondent and is a translation of an article in the French publication, *Les Amis des Roses* (the official journal of the French Rose Society).—ED.]

WE are pleased to inform our readers of an interesting communication which we have received from Mr. Nicolas, the sympathetic secretary of the American Rose Society. We take this opportunity of expressing our sympathy to this American society, and offer our best wishes for its prosperity. Furthermore, we recommend our members themselves to become adherents of this grouping. (See our reports.)

The aims of the Registration Service of the American Rose Society are:

1. To prevent the use of a name already given to a preceding rose.
2. To simplify names and avoid superfluous titles.

We cannot do better than quote Mr. Nicolas:

"As the name of a rose cannot be patented, our service makes up for this deficiency. Naturally, we have no legal authority to prevent a grower from naming a rose as he likes, but he could not take part in the competitions and exhibitions organised by the A.R.S.

"When a name is put before us, we immediately advise your Society, and the National Rose Society of England, as well as the Australian Society and the *Nos Jugunt Rosae* of the Pays-Bas. A period of three months is allowed to make the necessary investigations.

"The recent regrettable confusions demonstrate the necessity for an *entente*. Nowadays the rose is international, and needs to be protected. In fact, when two flowers bear the same name, they cannot enjoy a great popularity by reason of the inevitable confusion. Buyers hold back because they fear they will receive a yellow rose when they want a red one, or *vice versa*.

"Another aim of the A.R.S. service is the adoption of names which are as simple and short as possible and easily pronounced in all languages. Names which are too long are an obstacle to the popularity of the rose. It is thus that those two remarkable roses from all points of view, *Souvenir de Claudius* et de *Georges Pernet*, are known here under the names of C. and G. Pernet.

"As to that equally interesting variety, *Souvenir du Capitaine Fernand Japy*, it will be difficult for this to penetrate into America solely on account of its long name."

The Société Française des Rosieristes can but associate itself with this request. The Society will be pleased to give the American Rose Society all possible information when the occasion arises. In acting thus we shall serve a double end: we can in this way express our friendship for the United States, and we can equally

render a service to professional rosarians by drawing their attention to the need for brief and concise names.

## BOOK REVIEWS

THE publication of the fifth edition of the third volume of Schlich's "Manual of Forestry" (Schlich's "Manual of Forestry," Vol. III. Forest Management, including Mensuration and Valuation, by Sir Wm. Schlich, F.R.S. Fifth edition, viii+383 pages. London, Bradbury, Agnew and Co., 1925. Price 20s.), is a sure indication of the merits of the book, and of the importance of the subjects treated, which comprise Mensuration, Valuation and Management. The text has been in a great measure rewritten, and a considerable amount of new matter has been added. The production of the new edition has been no easy task, and Sir William Schlich must be congratulated on his crowning effort of a long life spent, first in the interests of Indian and later of British forestry. The book is a wonderful achievement for a man of eighty-five years of age.

This particular volume of the "Manual of Forestry" has been often considered too difficult for the ordinary landowner or the working forester to grasp and master; and no doubt the array of numerous formulæ, graphs and tables, have a deterrent look. Nevertheless, the mathematics involved are not of a very advanced character, and the technical terms employed are readily understood. All arts and trades which involve money value, compound interest, exact measures of products, and the like, do necessitate the use of applied mathematics, and the owner of woodlands and the skilled forester cannot ignore this study, except at the risk of financial loss. It must be remembered that an accurate knowledge of the volume of growing timber, its location, and its rate of production, is essential if a forest property is to be managed by ordinary business methods.

The first part of the book, Forest Mensuration, deals with the determination (to a fair degree of accuracy), of the dimensions, volume and rate of growth of single trees, and of woods and sample plots. Various methods of measuring standing and felled timber are described, and illustrations are given of the instruments that are used in this work. Particularly noteworthy is the section treating of the measurement of growing woods. The latest methods are included, such as the volume-curve method, Block's method of forming groups, the form-quotient or Swedish method, and the method used by the British Forestry Commissioners in connection with permanent sample plots. The preparation of yield tables for different trees is carefully explained. Yield tables have, up to the present, been compiled only for the more important species, and give the volume and number of trees per acre, their height and diameter, thinnings, rate of growth, etc., for different ages from youth to maturity, and for different classes of soil. Formerly we were dependent on German yield tables, but the Forestry Commission has begun to study the conditions of tree growth in the climate of these islands, and has already published yield tables for European larch, Scots pine and European spruce, which are based on measurements taken in a large number of adequately stocked sample plots situated all over Great Britain. Yield tables are necessary in all countries, where systematic management of forests is aimed at.

Part II is devoted to Forest Valuation, and is mainly actuarial, showing how the financial results of forestry may be determined. This part has been entirely re-written, and is up-to-date, the examples being taken from British money tables. These are calculated on the basis of the measurements recorded in Forestry Commission Bulletin No. 3.

The third part of the volume deals with increment, rotation, age classes, normal stock and normal yield. These are important subjects to study in the case of a large forest property, where the main object is economic and what is known as "sustained yield," is desirable. By this term is meant that the amount of timber felled each year is equal or approximately equal. This ensures a constant market, and secures to the owner a steady annual income. It affords constant employment year after year to a regular number of workmen, who can be properly instructed. The importance of these chapters in the book to officers administering state-owned forests, is evident.

The fourth part of the book is concerned with the preparation of forest working plans, which are essential for the proper management of all woodland estates and large forest properties. This part has been greatly improved and enlarged in the present edition. The volume concludes with six appendices, of which three are tables of round and quarter-girth measurements and of compound interest. Appendix IV gives abstracts from British and Continental yield tables. Appendices V and VI are examples of two working plans.—A. HENRY.

ONE need not be deeply versed in mycology to enjoy the story of those strange plants, the fungi, as presented in this attractive volume, "The Romance of the Fungus World," by R. T. and F. W. Rolfe (Chapman and Hall, 12s. 6d.), for the "fungi" of which the authors have most to say are just those common, yet curious, vegetables, of various forms and dyes, which, in meadow and in woodland, spring up in a night and which from childhood days one has grown accustomed to call by certain names, conscious often, if not always, of a passing shiver or a loathsome feeling. Think of toadstool or puddockstool; and has not "fungus" itself an evil smell about it? Whether it be the philology of these names and others, such as morel, mushroom and truffle, or the gastronomic value of the articles they represent, of which we wish to learn, we shall find something to help us within the pages of the book. In a few chapters which make interesting and pleasant reading, dealing with what may be called fungus-lore, the authors have brought together many literary and historical references from sources that are seldom quoted in the general run of mycological works. From early superstitions concerning "fairy rings" and "witches' brooms," we are introduced to the more modern but equally mythical mushrooms of the moon, monstrous coralline growths, possessing strange properties.

Fascinating as the mushroom of romance may be, it must give place to the mushroom in reality, and from the fungus of legend the authors pass to consider the fungus as it actually exists, its structure, mode of life and its place in the realm of nature; and to these aspects of their theme they devote the greater part of the volume. The characteristic family features of the larger British fungi are clearly and concisely given, together with appropriate text-figures. The physiology of the group, so different from ordinary green plants, is also discussed, since it gives the fungi a very special place in the general economy of things. As disease producers, both in plants and animals, not excluding man himself, they are responsible for much damage; nor do they leave alone the works of man. Yet the fungi are not without their uses. In medicine and in industry they play their part, while as food plants they deserve more attention than they have received, at least in this country. In France, Germany, Italy and Japan, as well as in other countries, the mushroom trade is officially recognised, and in certain districts it amounts to a considerable and profitable industry.



# THE Greatest Flower Show in the PROVINCES

WILL BE HELD IN

## SOUTHPORT

On AUGUST 26th, 27th and 28th

Over £2,900 in cash and other Prizes

### HORSE LEAPING COMPETITIONS

Subscribers of One Guinea will receive  
Three Season Tickets

Reduced charges of admission for excursion  
parties of not less than 20 persons, if tickets  
purchased not later than August 24th.

Mat Tickets daily and Cheap Excursions every week  
by the London, Midland and Scottish Railway.

Leaflet of detailed charges of admission to the Flower  
Show, the Flower Show Schedule and Official Guide  
containing list of hotels, lodges, boarding houses and  
private apartments, post free from Official Information  
Bureau, 5, Town Hall, Southport, or the Divisional  
Manager, Commercial Department, L.M.S. Railway,  
London Station, London, E.C.4.

Please mention THE GARDEN when writing.

Roundhay (Leeds) Horticultural Society

## ANNUAL SHOW

In Roundhay Park,

JULY 14th and 15th, 1925.

Schedules apply to GEO. E. HORTON, Hon. Sec.,  
67, Jackson Avenue, Roundhay, Leeds.

### SALE BY AUCTION OF

## JAPANESE DWARF TREES

and MINIATURE GARDENS,

ARDY PALMS BAY TREES

and Decorative Plants

GARDEN ORNAMENTS AND FURNITURE

By Messrs.

OTHEROE & MORRIS,

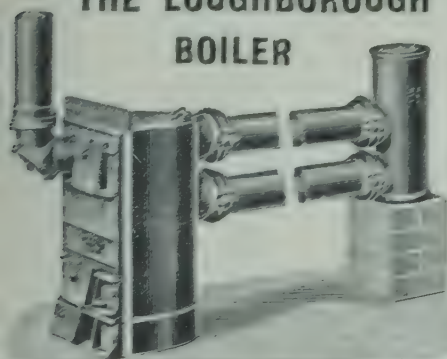
67 & 68, CHEAPSIDE, E.C.2,

On FRIDAY, JUNE 19th, at 1 o'clock.

Catalogues post free.

'Phone: City 3856.

## THE LOUGHBOROUGH BOILER



High reputation of this Boiler for efficiency  
and economy is still unrivalled

Easy to fix, easy to manage, and most  
economical in fuel, it is the ideal  
Boiler for the Amateur's Greenhouse

Price Lists and Estimates for complete  
apparatus on application

SENGER & CO., LTD. LOUGHBOROUGH  
LEICESTERSHIRE  
LONDON OFFICE: 122, VICTORIA ST., S.W.1

Please mention THE GARDEN when writing.

# REAMSBOTTOM'S ANEMONES

Gold Medal St. Brigid

(None Genuine without our Gold Medal Seal.)

12, 3-1; 25, 5 6; 50, 9 6; 100, 18/-

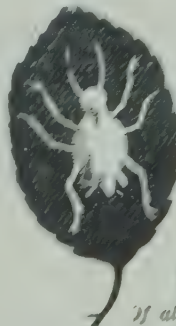
Plant now for bloom from late Summer onwards throughout Autumn and Winter.

Miss Campbell, Harewood, Seaton, Feb. 21st, 1925 writes:—"The St. Brigid Anemones I had  
from you (MAY, 1924) were VERY beautiful and are in bloom now."

Please write for Current Price List of Choicest Flowers for planting now.

PLEASE MENTION "THE GARDEN" WHEN WRITING

REAMSBOTTOM & CO., TOWER NURSERIES,  
WEST DRAYTON, MIDDLESEX.



## KILL GREEN FLY

By spraying your trees  
and other plants with

### CIRENGOL

9d. per tube.

Each tube, 3-1, contains five  
times the quantity of 9d. tube.  
If all Beekeepers, Ironmongers, and  
Chemists, or post free from

THOS. CHRISTY & CO.,

4-12, Old Swan Lane, London, E.C.4

## CIRENGOL

Please mention THE GARDEN when writing.

## SWEET PEAS AND OTHER CLIMBING PLANTS

LOOK BETTER.  
GROW BETTER  
WITH  
LESS TROUBLE

WHEN GROWN ON  
"SIMPLICITAS" PATENT  
NETTING.

DOES NOT INJURE  
BLOSSOMS OR FOLIAGE.  
LASTS FULLY FIVE YEARS.  
WRITE FOR PARTICULARS TO  
GARDEN SUPPLIES LTD. CRANFORD, LIVERPOOL



Please mention THE GARDEN when writing.

## Eureka WEED KILLER

Largest Sales. Always satisfactory.

PRICES (Powder):

When Fine, make 124 galls. Weed Killer	£0 1 9 ca.
Medium " " 25 " " " "	0 3 0 "
Large " " 140 " " " "	0 11 0 "
Case to make " 250 " " " "	1 1 0 "
" " " " " " " "	1 10 0 "
" " " " " " " "	2 2 6 "
" " " " " " " "	3 17 6 "

Also LIQUID, double strength.

## LAWN SAND

The Best Lawn Medicine

PRICES:

2 lbs., 1 3; 7 lbs., 2 6; 14 lbs., 4 -; 28 lbs., 7 -
56 lbs., 13 -; 1 cwt., 25 -; 5 cwt., 112 6.

## FUMIGANTS SPRAYS INSECTICIDES

SOLD BY AGENTS.

If any difficulty in obtaining write the "Any insecticide"

TOMLINSON & HAYWARD, LTD.,  
NEWLAND, LINCOLN.

Write for free booklet.

"Chemistry in Garden and Greenhouse."

Please mention THE GARDEN when writing.

YOU CAN ALWAYS HAVE  
BEAUTIFUL FRAGRANT  
BLOOMS BY USING

## Carmona Fertilizer

FOR FEEDING YOUR PLANTS

1 lb.	3 lb.	5 lb.	10 lb.	25 lb.
9d.	1 3	1 6	3 -	6 -
Post Free	Post Free	Post Free	Post Free	Post Free
13	19	4 -		



If your Seedsman does not stock Carmona send your order direct to the Manufacturers—

ROBINSON BROTHERS Ltd., West Bromwich, Staffs.

Please mention THE GARDEN when writing.



In Britain, practically all species are neglected except the common mushroom, and the authors advance a timely plea for a greater encouragement of the use of fungi as food. Unfortunately, there is no easy method whereby an edible fungus can be told from a poisonous one. The only sure way is to know one species from another, and the information which the authors supply, together with the numerous and really excellent photographs illustrating their book, should prove of assistance towards gaining that knowledge. The account of the cultivated fungi should be of special interest to the gardener, but since every gardener lives close to nature, he will find, as we have endeavoured to indicate, much more that will appeal to him in this story of some of nature's queerest products.

#### A BOOK ON HOUSELEEKES.

As a demonstration of the confusion existing in this group and the plethora of names by which it is encumbered, M. Correvo's little book (*"Les Joubarbes,"* par Henry Correvo. Bruxelles, 1924) is effective. It will serve as a kind of horrible example, but if the despairing gardener hopes to find in it some golden way to easy identification and correct nomenclature, he will be disappointed. M. Correvo, who knows the semperviva better than most people, repeats Baker's Key, published half a century ago, and leaves the matter there. His Introduction, charmingly written and full of pleasant personal reminiscences, is the best part of the book, though its interest is sentimental rather than scientific. The main list of "species" runs to over a hundred and seventy, excluding synonyms and hybrids! Many of these are obscure and unimportant forms, and no fewer than twenty-five of them are mere garden names—*nomina nuda*, to which no description attaches. The study of this difficult group is not advanced by such entries as "*S. CRASSICAULE Hort.* C'est un *tectorum* à souche plus épaisse et formant un touffe compacte." But as a catalogue of sempervivum names, with an indication of what the plants which they represent are supposed to look like, and where they are supposed to come from, M. Correvo's little book may be held to justify its existence. —R. L. P.

#### Royal Gardeners' Orphan Fund.

The annual festival dinner which was recently held under the chairmanship of the Right Hon. Sir Alfred Mond, Bt., M.P., at the Hotel Victoria, London, was the means of adding a welcome increase to the Fund's income. During recent years the Fund has had to live partly on capital, as the annual income has been insufficient to carry on the excellent work of the Institution. The Royal Gardeners' Orphan Fund was formed during the Jubilee year of Queen Victoria to assist in the maintenance of orphan children of gardeners in private and public establishments, foremen and managers of nurseries and seed houses, so that its scope is very wide.

Sir Alfred Mond was a splendid chairman, and in the course of an admirable speech referred to the inborn love of gardening in all Britons and expressed the opinion that while the gardens of our Islands were the best in the world, our gardeners were also the best and most conscientious of all. An orphan fund was, he said, the most deserving of all charities, because orphans have lost the bread-winner early in his life before he had had an opportunity of making any adequate provision for his family.

The Hon. Treasurer of the Fund, Mr. Edward Sherwood, eloquently supported Sir Alfred Mond's appeal for generous support and said that it was the ambition of the committee to replace the investments which, during

the black days of the late war were drawn upon, and also to increase the amount of the allowance which was now made to the orphans. He felt sure that everyone would agree that, in these times, the weekly allowance of five shillings to each orphan could advantageously be increased so that the children could be given a better start in life.

The Secretary announced that just over a thousand guineas had been given or promised. Sir Alfred Mond headed the list with 100 guineas. Other donors were Messrs. Hurst and Sons 50 guineas, Messrs. Sutton and Sons and Mr. Whitpain Nutting £50 each, Messrs. Rothschild 25 guineas, the Council of the Royal Horticultural Society 20 guineas. Other generous supporters of the appeal included such well known horticulturists as Mr. H. J. Jones, Messrs. George Bunyard and Co., Messrs. Corry and Co., Sir Jeremiah Colman, Messrs. Barr and Sons, Mr. Peter Barr, Mr. and Mrs. W. Wells, Junr., Mr. H. B. May, Mr. A. Dakwins, Mr. W. H. Cutbush, Mr. D. B. Crane and Messrs. Charlesworth and Co.

Various members of the Committee acted as stewards and collected considerable amounts. For many years past the most successful has been Mr. David Ingemells, the well known Covent Garden salesman, who is also the Chairman of the Committee. The generosity of "Covent Garden Men" is proverbial and this year, by collecting £260, Mr. Ingemells broke his previous records for the Fund. Mr. J. M. Bridgeford of Messrs. Watkins and Simpson, Mr. J. E. Dixon of Messrs. Hurst and Sons, Mr. J. F. McLeod, Mr. G. F. Tinley, Mr. Wm. Howe, Mr. R. B. Leach, Mr. W. Auton, Mr. D. Campbell, Mr. R. Findlay, Mr. R. B. Ker and Mr. G. H. Barr, also collected considerable amounts.

Although, as we have stated, the function was very successful from a financial point of view, the Fund still requires further help and we confidently appeal to our many readers to send contributions to this most deserving and admirable gardening charity. The management expenses are exceedingly low, so that the great bulk of money subscribed goes to the benefit of gardeners' orphans. The address of the Royal Gardeners' Orphan Fund is 19, Bedford Chambers, Covent Garden, London, W.C.2, and the Secretary is always ready and willing to give any information regarding the Institution.

**National Sweet Pea Society.**—We are reminded by the Secretary that the twenty-fifth show of the National Sweet Pea Society will be held at the R.H.S. Hall, Vincent Square, Westminster, on July 16th and 17th next. It is the usual custom with the Society to hold alternate shows in the provinces and any society which may contemplate inviting the N.S.P.S. in 1926 should communicate with Mr. A. C. Bartlett, 318, Kew Road, Kew, who will willingly supply all information and schedules.

**Treatment of Garden Refuse.**—Messrs. Adco, Limited, desire us to state, in the interests of our readers, that any garden refuse, which is collected and intended for use as manure, should be treated as it accumulates and while it is fresh. It is now known that rubbish lying in the heap untreated for even a short period, loses a large percentage of its "fermentable energy," i.e., the bacterial food, which is so valuable in making synthetic manure. We hope that with this treatment our readers will get the best results and prevent further waste.

#### CATALOGUES RECEIVED.

Messrs. Carter and Co., Raynes Park.—Tools and Requisites for Garden and Lawn. A thoroughly up-to-date manual for all interested in the care of their lawns.

Messrs. Barr and Sons, King Street, Covent Garden.—Spring list of Bedding Plants and Dahlias.

## On the Making of Gardens.

**Garden Ornament.** By G. JEKYLL. Large folio. With 600 illustrations. 3 Gns. By post £3 4s. 3d.

**The Gardens of Italy.** By A. T. BOLTON. Large folio. 400 Illustrations. 3 Gns.

**Gardens for Small Country Houses.** By Sir L. WEAVER and G. JEKYLL. Large quarto. 25s.

**Colour Schemes for the Flower Garden.** By G. JEKYLL. 100 Illustrations. 15s.

**Gardening for Beginners.** By E. T. COOK. Coloured Plates and 200 Illustrations. 7th edition. 17s. 6d.

**Wall and Water Gardens.** By G. JEKYLL. 17s. 6d.

**The Planning and Planting of Little Gardens.** By G. DILLISTONE. 6s.

**Shrubs for Amateurs.** By W. J. BEAN. 5s. net.

**The Rock Garden.** By E. H. JENKINS. 7s. 6d.

For any of the above books, or for a full prospectus, write to "COUNTRY LIFE," 20, Tavistock St., Covent Garden, London.

### THOMSON'S MANURES

Famous for  
half a century.  
Unrivalled for all  
Garden Crops.

Sold by  
Seedsmen and Nursery-  
men everywhere.

Sole Makers—  
**WM. THOMSON  
& Sons, Ltd.,  
CLOVENFORDS**



Please mention THE GARDEN when writing.

## BROOM SEEDS

from the Celebrated Daisy Hill Strain

SOW AT ONCE

	Per Pkt.	Oz.
Andreanus	1/-	5/-
" (late flowering)	1 6	7 6
" splendens	2 6	—
" dwarf	1 6	—
Butterfly	1/-	5/-
Golden Sheaf	1 6	7 6
Mayfly	1 6	7 6
" (late flowering)	2 6	—
Newry Gold	1/-	5/-
Sulphurea (late)	2 6	—
White	6d.	3 6

**T. SMITH, Daisy Hill Nursery, NEWRY**

Please mention THE GARDEN when writing.



# THE GARDEN.

## WEBBS' SPECIAL LIST

Send for  
Of all the finest varieties of Vegetable and Flower Seeds for Summer and Autumn Sowing. Post free on request. WEBB & SONS, LTD., The King's Seedsmen, Stourbridge.

**WATERER'S GOLD MEDAL RHODODENDRONS** and Azaleas, Rare Hardy Shrubs, Alpine and Perennial Plants, Vegetable and Flower Seeds, Outdoor Chrysanthemums, Bedding Plants and Dahlias. Catalogues Free.—**JOHN WATERER, LTD.**, Bagshot (Surrey), and London.

## WAKELEY'S PATENTED HOP MANURE.

The original and only substitute for Stable Manure. See advert. on back cover.

## WM. DUNCAN TUCKER & SONS, LTD.,

Lawrence Road, South Tottenham, N.15.—Conservatories, Winter Gardens, Vinerias, Peach Houses, Portable Buildings, etc.

## BIRDS' BATHS, GARDEN VASES, SUN-

ALS, NESTING BOXES. Catalogue (No. 4) free.—**WORTON**, 60, Buckingham Palace Road, S.W.

## TANNED GARDEN NETTING, small mesh,

1 yds. by 1 yd., 2s.; 25 yds. by 2 yds., 4s.; 40 yds. by 1 yd., 3d.; 40 yds. by 2 yds., 6s. 6d.; 40 yds. by 3 yds., 9s. 9d.; carriage paid. Compare our netting with others. Lists now ready.—**GALLOP**, Net Manufacturer, Hastings. Telephone: 352.

## WELLS' CATALOGUE OF CHRYSANTHE-

MS now ready, and will be sent post free on application.—**WELLS & CO.**, Mersham, Surrey.

## TENNIS BOUNDARY NETTING, 50 yds. x

20 ft., 20/- Iron Standards, 9 ft., 3/- each. Tennis Nets from 1/- Sports Lists now ready.—**GALLOP**, Net Manufacturer, Hastings.

## FEED THE BIRDS.—Rotless Tanned

NETTING. Small mesh. As supplied by us to the Royal Parks. In two qualities. 50 yds. by 1 yd., 4/-; 6/9; 2 yds., 13/6; 3 yds., 12/-; 20/3; 4 yds., 16/-; 27/-; 25 yds. by 8 yds., 27/- Any size supplied. Carriage paid; approval paper qualities, 3/6 50 yds., measured mesh closed.

## ALVANISED WIRE NETTING.—Superior

Quality, 50 yd. rolls.  
1 ft. 1 ft. 6 in. 2 ft. 2 ft. 6 in. 3 ft. 4 ft. 5 ft. 6 ft.  
.. 2/10 4/1 5/1 — 7/1 9/5 11/9 14/2  
.. 3/11 5/8 7/2 8/6 9/8 13/- 16/3 19/6  
.. 4/7 6/6 8/3 — 11/6 15/3 19/1 22/11  
.. 6/5 9/2 11/8 14/3 16/7 22/2 27/9 33/3  
by 1 1/2 ins., 13/2.

## TENNIS BOUNDARY NETTING.—Lines top

bottom, 25 yds. by 2 yds., 16/3; 3 yds., 18/3; 4 yds., 25/3; carriage paid; approval. Standards for fixing to, also playing poles and all requisites supplied.

## WREN MOWERS, 5 Riveted Blades, high

spiral, brass bushings, close cutting, highly finished, unequalled value, 8 in., 25/6; 10 in., 27/-; 12 in., 29/6. Garden Rollers 37/6.

## NETTING.—Barked, Extra Strong and

flexible, only 2 1/2 d. square yard. Standards for fixing to.

## LIPSE SPRAYER.—Simplest and Most

efficient for Insecticides, Limewashing, Disinfectants, Creosoting, etc. 31/- Carriage paid.—**E. B. HAWTHORN, LIMITED**, Dept. Shrewsbury

## RDEN NETS.—Best tanned, small mesh,

1 yds. by 1 yd., 2/-; 25 yds. by 2 yds., 4/-; 25 yds. by 3 yds., 6/-; 25 yds. by 4 yds., 8/- Carr. Paid. Satisfaction guaranteed. Tennis nets from 10/- Special nets for tennis boundary. Pea ing nets. Lists and samples free.—**G. JARRETT**, Netter, Rye.

## LAXTON'S STRAWBERRIES AND FRUIT

ES.—Our Novelty List for 1925 is now issued, and contains new Apples, Raspberries, Currants, Strawberries, etc. Garden Lovers should have this. Post Free.—**LAXTON & SONS**, Nurseries, Bedford.

## BARR'S SEEDS FOR JUNE SOWING.—

For VEGETABLE AND FLOWER GARDEN, ROCK GARDEN and GREENHOUSE. Finest Selected Strains and Tested Growth. Special Lists Free.—**BARR & SONS**, 11, 12, and 13, King Street, Covent Garden, London, W.C.2.

## IRON AND WIRE FENCING FOR GAR-

DENS.—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—**BOULTON AND PAUL, LIMITED**, Norwich.

## VANCOUVER ISLAND and Pacific Coast

rare ornamental alpine and lowland plants, bulbs, etc. Only those difficult or impossible to obtain in England are offered. Plants well packed and despatched at the right time of year arrive in good condition. Write for list.—**J. BENNETT**, Lake Hill P.O., Victoria, B.C., Canada.

## CONTENTS.

	PAGE
Frontispiece	
Current Work in the Herbaceous Border. (Illustrated)	347
Star and Mignon Dahlias. (Illustrated)	348
My Rock Wall. (Illustrated)	349
Cottage Gardens. (Illustrated)	350
The Canadian Kew. (Illustrated)	351
Gardens of Healing—III	352
Irises at Vincent Square. (Illustrated)	353
Motor Mowing Machines. (Illustrated)	354
Simple Gardening. (Illustrated)	356
	358

## CRAZY PAVING.—Dwarf Walling, Rockery

Stone direct from quarries. Cheapest and most artistic on market.—**CLAYTON AND HAMMOND, LIMITED**, 53, Baker Street, W.1.

## SUNDIALS, BIRD BATHS, VASES.—In

Imperishable Reconstructed Stone. Write for catalogue G2.—**CLAYTON AND HAMMOND, LIMITED**, 53, Baker Street, W.1.

## LOOK! TANNED GARDEN NETS.—All

orders despatched same day. 25 yards by 1 yard, 2/-; 25 by 2, 4/-; 25 by 3, 6/- All carriage paid. Any sizes supplied. Also Tennis Boundary Nets.—**MOORE & Co.**, Net Works, Rye.

## PULLETS, pure breeds, laying, 7/6 each,

90/- doz.; Chickens, 1,000, great bargain, month old White or Brown Leghorns, Sussex month old, 2/- each, 24/- doz.; two month, 3/- each, 36/- doz.; three month, 4/- each, 48/- doz.; 500 Crossbreeds, same ages, 18/-, 24/-, 38/- doz., carriage paid live delivery. List free.—**CONTINENTAL FARM**, Stratford, Essex.

## IMPROVE YOUR GARDEN by the use of

solid Oak Trellis Screens; they are ideal for growing creepers of all kinds and for securing privacy, at the same time adding an artistic feature that will last a lifetime (being pickled in preservative). No trouble to erect (being made in sections). Send for lists and get an estimate from **W. T. REVITT**, Railway Works, Olney.

## ANTIRRHINUMS, Rose Queen, Fascination

and Scarlet King, 1/- doz., 7/- 100, carriage paid, c.w.o.—**WARREN**, Nurseryman, Gerrards Cross, Bucks.

## TO LOVERS OF ROCK GARDENS.—Inex-

pensive plants for Sale. Apply **NELL SHAW**, Hatfield Place, Bath.

## MANURES. The most complete little book

on the subject is "The Manual of Manures," by **H. VENDELMANS**. 4/5; by post, 4/9. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## GARDEN DESIGN is best dealt with in

"Planning and Planting of Little Gardens," by **G. DILLISTONE**, 6/-; by post, 6/6. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## SUTTON'S PANSIES.

The popularity of these beautiful flowers has, in recent years, been greatly extended by many rich and varied colours produced in our strains.

## SUTTON'S PERFECTION.

The finest strain of Pansy in cultivation. The variations in colour and marking of these flowers are most delightful. Per packet 5/-, 2/6, and 1/6.

**SUTTON & SONS, THE KING'S SEEDSMEN, READING.**

## DOBBIE'S PLANT CATALOGUE now ready.

Free to all readers. Please mention THE GARDEN when writing.—**DOBBIE & Co., LTD.**, Edinburgh.

## CHEAP GOVERNMENT WIRE !!! Great

for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760 yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—**GREEN'S GOVERNMENT STORES**, 69, Albert Street, Lytham.

## HERRING NETS to protect all kinds of fruit,

etc., approximately 100 ft. by 30 ft., 11/6 each, carr. paid. No second profits. Cash with order.—**WM. G. GRIGOR**, Port Gordon Station, Banffshire.

## GARDEN NETTING.—Best selected, small

mesh, tanned, 25 by 4 yds., 8/-, or 8 yds., 16/- Carriage paid Tennis Nets and Standards. List free.—**STRAWBERRY NETTING Co.**, 5, Suffolk Terrace, Lowestoft.

## FULL OF WISE SAWS AND MODERN

instances our catalogue offers all that is brightest and best for the present day garden. The choice plant at Sixpence a time may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—**FEILDEN AND CROUCH**, 2, Fairseat Nurseries, Wrotham, Kent.

## NEW ZEALAND PLANTS for Seaside

Gardens.—**Pittosporum nigrescens** for hedges, pot grown plants for planting, now 18/- per doz. **Olearia Macrodonata**, 1 1/2 ft., 12/- doz., splendid for hedges. **Olearia Haastii**, 1 ft., 12/- per doz. **Brachyglottis repanda**, 2/6 and 3/6 each. **Clematis indivisa**, 2/6 each. **Ozothamnus**, 2/6 each. **Muhlenbeckia complexa**, 1/6 each.—**TRESEDER & Co.**, The Nurseries, Truro.

## SEWAGE DISPOSAL FOR COUNTRY

HOUSES.—No emptying of cesspools; a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—**WILLIAM BEATTIE**, 8, Lower Grosvenor Place, Westminster.

## PRIMULA AND ALPINE SEEDS from

choice (1,500) collection. Rare Seedlings and Rockery Bulbs. Lists free.—**Rev. J. F. ANDERSON**, Glenn Hall, Leicester.

## GARDEN NETS, tanned small mesh for Fruit

and Strawberry Protection, 30 yds. long by 2 yds. wide, 4/6; 30 yds. by 3 yds., 7/-; 30 yds. by 4 yds., 9/-; 30 yds. by 5 yds., 11/6; 30 yds. by 6 yds., 14/- All carr. paid.—**COUSSENS & Co.**, Net Works, Rye.

## GARDEN NETS, tanned, small mesh, for

Peas, Seeds, and Strawberry protection. 30 yds. long, 2 yds. wide, 4/6; 30 yds. by 3 yds., 7/-; 30 yds. by 4 yds., 9/-; 30 yds. by 5 yds., 11/6; 30 yds. by 6 yds., 14/- Carr. paid.—**ALFRED ROBINSON**, Garden Net Works, Rye.

## JAMES BACKHOUSE, F.L.S., F.R.H.S., for

many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to **CAER FEGLA**, Arthog, North Wales.

## GREENHOUSE PAINTING AND GLAZING.

"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7 lb. tins, 4/- post free; 14 lb. tins, 5/6 each, carriage extra, tins free.—Full particulars from **W. CARSON & SONS**, Grove Works, Battersea S.W.11/



# Abol Aids to a Perfect Garden

Abol Specialities are used and recommended by experts. They are always reliable, economical and safe, and are now recognised as standard horticultural requisites.

## Abol Non-poisonous Insecticide

A sure-kill for Green Fly, American Blight and other insects. Without equal as a remedy for mildew on Roses, etc. Used in the Royal Gardens.  $\frac{1}{2}$  pt. 1/4; pt. 2/2; qt. 3/4;  $\frac{1}{2}$  gall. 5/3; gall. 9/6.

## Abol Patent Syringes

Give a perfect spray which may be varied from fine to medium or coarse, as desired. Specially recommended by the National Rose Society. Last a lifetime.

No. 4 (1x14), 16/4; No. 5 (1x20), 21/-; No. 6 ( $1\frac{1}{2}$ x20), 26/- Bend extra, 1/6

## Abol White Fly Compound

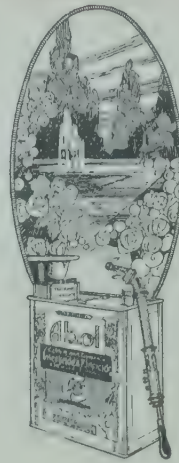
A safe remedy for White Fly on Tomatoes and Cucumbers. Economical and easy to apply. Simply pour down centre path of the house at  $2\frac{1}{2}$  fluid ozs. to 1,000 cubic feet. From  $\frac{1}{2}$  pt. 1/- to gall. 15/- Postage extra.

## Abol Special Manures

For Roses, Sweet Peas, Chrysanthemums, Tomatoes, Potatoes, and Hop Manure; also Abol Horticultural all-round Fertilizer.

## Abol Weed Killer (Poison)

An extremely reliable and economical preparation, which entirely eradicates weeds from garden paths and walks, carriage drives, etc. In liquid and powder forms, both equally effective. Liquid:  $\frac{1}{2}$  gall. 4/-; gall. 7/6; 2 galls. 14/6. Powder: to make 12 galls. 2/-; 25 galls. 3/6; 50 galls. 6/-; 100 galls. 11/6.



Write for descriptive folder and "Guide to Garden Pests," gratis and post free.

Sold by Nurserymen, Seedsmen, Florists, Chemists, Ironmongers and Stores.

Sole proprs. and mfrs.

Abol Limited, 9, Beltring, Paddock Wood, Kent.

## Notes from Maidstone.

### IRISES.

Gold Medal, Chelsea, 1925  
Gold Medal, Chelsea, 1922  
Gold Medal, R.H.S., 1924  
Silver-Gilt Medal, Chelsea, 1923.

Silver Cup, Chelsea, 1924

Looking back we find that we were receiving Awards for Iris so long ago as 1895, but the above are some of those recently made for our Famous Iris and give an idea of the high standard of our collection. However, a far better way of appreciating this is to visit our Nurseries, where the Iris may be seen in full bloom and the great variety and vigour of our plants will be their own recommendation.

We should be glad if intending visitors would advise us so that we can arrange for an Iris expert to be present. Our Catalogue containing all the best varieties will be sent post free.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.



## KILL GREEN FLY

By spraying your roses and other plants with  
**CIRENGOL**  
9d. per tube.  
Larger size, 3/-, contains five times the quantity of 9d. tube.  
If all Seedsmen, Ironmongers, and Chemists, or post free from  
**THOS. CHRISTY & CO.,**  
4-12, Old Swan Lane, London, E.C.4.

## CIRENGOL

Please mention THE GARDEN when writing.



## FOSTER & PEARSON LIMITED

Established 1841

Please write for Estimates for durable Greenhouses, Boilers, etc., to

## BEESTON NOTTS

YOU CAN ALWAYS HAVE  
BEAUTIFUL FRAGRANT  
BLOOMS BY USING

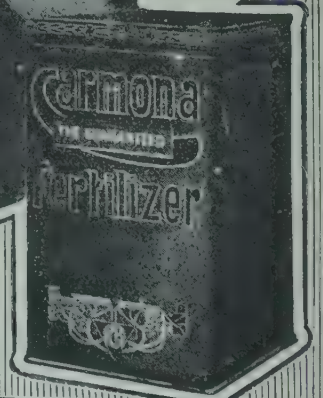
# Carmona

## Fertilizer

FOR FEEDING YOUR PLANTS

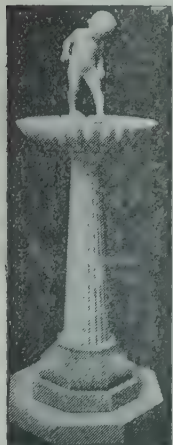
1-lb. 9d. Post Free 1/3	2-lb. 1/3 Post Free 1/9	7-lb. 3/- Post Free 4/-	Bags 112-lb. 26/- Carriage Paid.
----------------------------------	----------------------------------	----------------------------------	---

A Carmona  
measuring  
Spoon in  
every tin.



If your Seedsman does not stock Carmona send your order direct to the Manufacturers—

## ROBINSON BROTHERS Ltd., West Bromwich, Staffs.



TO Beautify your Garden

This charming new design

Fluted  
**BIRDS' BATH  
& PEDESTAL**  
3ft. high.

Special Price  
**£5 5 0**

"Boy with Frog" figure, 35/-

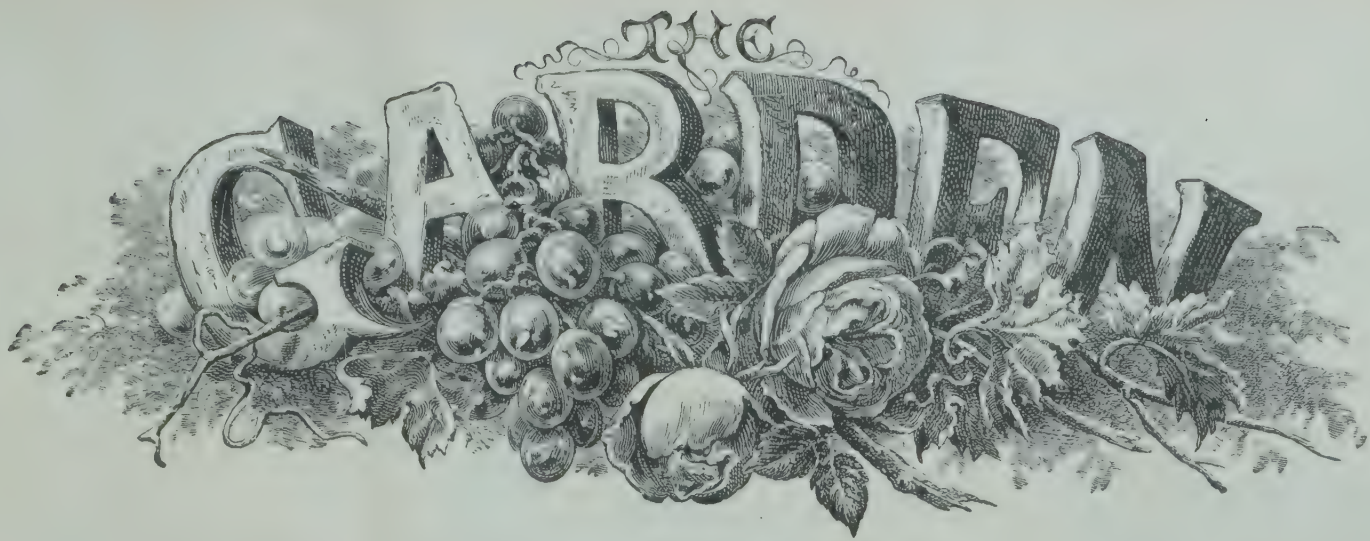
Illustrated Booklet "Ideal Garden Ornaments," post free.

**SANDERS & CO.,** Sundial House,  
365, Euston Rd., London, N.W.1

Makers of Re-inforced Stone Garden Ornaments.

Please mention THE GARDEN when writing.





VOL. LXXXIX.—No. 2796.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
 Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
 Entered as Second-class Matter at the New York, N.Y., Post Office.

JUNE 20, 1925



WHEN PLANNING A GARDEN CAREFUL CONSIDERATION SHOULD ALWAYS BE GIVEN TO THE CLOTHING OF ENTRANCE PIERS AND WALLS. RAMBLING ROSES ARE HERE UTILISED FOR THE PURPOSE WITH THE BEST NATURAL EFFECTS.



## CURRENT WORK in the HERBACEOUS BORDER

THE advent of June usually shows the early summer border at its best, and the climatic conditions this year and last have been such that a particularly good display may be found in most gardens. The success of these borders should by no means encourage the gardener to rest on his laurels, however, with regard to the main display which will come in July, August and September.

These later borders should be kept scrupulously clear of weeds, for almost all herbaceous plants are gross feeders, and

with the seeing eye will know just when this rapid extension is due, and will place his stakes in position at the appropriate moment. In the case of a reasonably sheltered border, stout bamboo canes, 4ft. tall, will be ample to stay even really well grown delphiniums, but in exposed situations, strong hardwood stakes, at least 6ft. tall, will be called for. The hollyhock, as usually grown, requires similar support, while many of the taller mulleins (*verbascum*), are self-supporting, unless, indeed, the plants are spindly through over-thick planting. That

these stakes should be so inserted that they will be as inconspicuous as possible when growth is completed, goes without saying; and this, in practice, usually means placing the stake *behind* the plant to be secured, but where damage, when it occurs, always follows wind from some particular quarter, the stakes should be placed to windward, and pains be taken to conceal them, as growth takes place, by training shoots to mask them.

The staking of plants of slighter growth requires a little more subtlety of thought than many otherwise good gardeners appear to possess. Delphiniums of the *Belladonna* set look truly pitiable when carefully trained up formal stakes, and such kinds as *Erigeron speciosum*, though stouter in growth, look little better when forced to grow erect. The *erigeron* is an untidy plant and any attempt to make it imitate the smug "maximum daisies" is doomed to failure. Let us, rather, grow it in bold drifts, using short, rather stout hazel or maple brash partially to support the plants farthest from the eye,

leaving those towards the front of the border to tumble at will over pinks, *alyssum* or other spring flowers which may form a front edging. Some plants, such as the single and double forms of *Gypsophila paniculata*, may be sustained satisfactorily on the "bundling" principle—that is, by the use of one stick towards the centre of the plant and encompassing strings at intervals, but care must be taken not to secure the growths for too great a distance from the ground. In the case of *phloxes*, which have had the growths suitably thinned, a fairly slender stake to each spike is a not unreasonable proposition, and *Michaelmas daisies*, grown on the now favoured single-stem principle, will receive the same treatment. As a general rule, however, the staking of plants in the front half of the border may be most satisfactorily arranged by the free use of feathered brash of the kind we commonly use for annual climbers, such as the sweet pea. The light tips of these feathered stakes will come in useful, equally with the stouter bases, and very little raffia should be required. Where tying is necessary, the material used should be soft in texture and be twisted several times, so that stems may expand without being constricted or even severed by the tie. This is particularly necessary with stout-growing kinds, such as the *delphinium*.

The day is not far distant when the use of the hoe in the herbaceous border will become impracticable for this season; until that day arrives, use this essential tool very freely, striving always to get a fine surface tilth which, while aerating the soil, will help, later on, to retain soil moisture. Should a dry spell threaten, a mulch of more than half-decayed manure, or even of rough leaf-mould or lawn clippings will prove beneficial,



THE BROAD DRIFT OF BLOOM IN A SUMMER BORDER.

the best made of borders will scarcely find adequate nourishment for plants and weeds. Small grass weeds, uprooted last month and left to shrivel on the surface, will be found to have formed fresh roots, and unless these weeds are promptly dealt with several barrow loads will have to be removed where one or two emptyings of a fair sized trug should suffice. Do not look at the consequences of neglect solely from the point of view of wasted labour, on the "stitch in time" principle, but stop to consider the plant food of which the neglected border has been robbed. Good gardeners, working on light and hungry soils and not content with the natural garniture of weeds usually to be found in late autumn in the kitchen garden, sow a catch-crop to use up, as far as possible, the feeding elements ready for immediate digestion, so that, the leaching rains of winter past, these available plant foods may be restored to the ground simply by digging in the catch-crop. The value of the process consists entirely in the restoration of the nitrates and other essential soil ingredients by burying the crop of otherwise uneconomic material; judge then of the loss which is likely to accrue to a permanent border if an equal or greater bulk of vegetation is removed altogether.

Beyond early and careful weeding, current work in the border will consist of staking, hoeing, feeding, the combating of insect and fungoid pests, and, if necessary, mulching. Staking, when it becomes due, is urgent. Very few people like to see a forest of stakes towering above the plants (some dahlia enthusiasts seem to be an exception to the rule!), but a *delphinium*, for instance, once it starts to "run" to flower, may extend anything from 1ft. to 2ft. in a single week. The gardener



and in any case, its use can do no harm. The delphinium, in particular, appreciates frequent dressings of "fat" material, from which the nourishment will percolate to the roots.

A border thoroughly well made within the last three years should produce a wealth of blossom without summer feeding, but the grosser kinds, particularly phloxes and delphiniums, repay attention, and occasional doses of weak solutions of sheep or hen manure, or of soot water, help very considerably. These should, if possible, be applied after soaking rain, otherwise a preliminary soaking with rain-water, or its equivalent, is necessary.

The sprayer will be in fairly constant use now in the rose garden and any aphides on herbaceous plants should present little difficulty. The fortnightly use of Burgundy mixture or a special fungicide, is necessary in many districts if hollyhocks are to be successful, and Burgundy mixture is also reasonably effective against mildew on the delphinium. The only sure preventive of this, however, is to shun, or, if necessary, discard varieties subject to this plague. Diseased growths of most herbaceous plants should be removed forthwith, before the mischief can spread. These should be burned so that there is no chance of infection to other plants.

R. V. G. W.

## STAR AND MIGNON DAHLIAS

AMONG DECORATIVE FLOWERS, THE DAHLIAS, MORE ESPECIALLY THE STAR AND MIGNON FORMS, STAND OUT AS PRE-EMINENT FOR USE IN BEDS AND BORDERS. WITH THEIR LONG PERIOD OF BLOOMING AND BRIGHT WARM COLOURINGS THEY ARE INVALUABLE.

**D**URING the last few years great progress has been made in the cultivation of dahlias. All the older varieties have been improved upon and new varieties have made their appearance. Among the latter are two forms of outstanding merit in the progress of horticulture, the star and mignon dahlias. Their peculiarities are quite distinct, inasmuch as the star dahlias attain a height of 4ft. generally and the mignon dahlias only 18ins., but they both share the same distinction of being something different from other kinds.

The star dahlia was raised and first introduced by Messrs. J. Cheal and Sons, Limited, and the first variety was known as Crawley Star. The flower is a fine clear pink. This was the forerunner of a collection which has rapidly become popular, and is well worth growing in every garden. They are very free-flowering and carry their blooms on long, stiff stems, which make them very useful as cut flowers for house decoration.

The star dahlias are more self-supporting than the large-flowered varieties. Three 4ft. canes are adequate support in the most exposed places, and one cane in the centre in sheltered positions. They have also another asset, they do not encourage earwigs, which have always been a drawback in the good cultivation of the older varieties. The varieties are now too numerous to be detailed. Each variety has been chosen for its distinct colouring and shape of flower, also for the good form and habit of the plant. The selection that now exists affords a wide choice for every taste.

Some of the varieties of outstanding merit are Haslemere Star, introduced in 1924, which has very clear rose pink flowers borne on long, stiff stems. This variety has been recommended for trial at Wisley.

Horsham Star is another 1924 introduction with coppery rose-coloured flowers turning to mauve in the centre, which produces a very pleasant effect.

Some of the earlier varieties are Bronze Star, which is true to its name, the flowers are a rich bronze, turning darker towards the centre; Cuckfield Star, yellow with a pleasing tint of pink; Primrose Star, a fine clear primrose yellow, the flowers produced in great profusion; Southern Star produces a charming colour scheme of crimson, apricot and purple; White Star, a lovely pure white, the petals conspicuously shown off by orange-coloured stamens; Yellow Star, a delightful yellow, which has become popular owing to its clear colouring.

The mignon dahlias are absolutely a class on their own, and, as their name signifies, their dwarf nature, their usefulness as bedding plants or for the edging of borders is unique. They are not fastidious as to soil, and do not require any stakes for support. The most important point in their culture is to keep the old flower-stalks picked off. Failing this, they soon cease to flower. There is a wide range of colour among the numerous varieties, and it is difficult to choose between them. Some of the favourites are Albion, pure white; Benbow, crimson; the well known Coltness Gem, crimson-scarlet; Daphne, maroon; Dazzler, a fine orange-scarlet; Janet, bright orange; Kathleen, a deep apricot; Louise, delicate primrose, very effective and very popular.

The star and mignon dahlias require the same treatment as other varieties. They should be planted out about the first week in June. A little soot or lime put round each plant as a protection against slugs is advisable, also liberal watering and syringing after a hot day will help the plants during the growing season. On light soils mulch-

ing will be beneficial in dry weather. The star dahlias should be planted from 3ft. to 4ft. apart and the mignons from 15ins. to 18ins. Neither of these varieties require thinning or pinching, and both provide an excellent splash of colour in the later months of the year.

R. C. J.



STAR DAHLIAS AT MUNSTEAD WOOD.



# MY ROCK WALL

A GARDENER'S PLAYTHING

**M**OST gardeners have some little corner of the garden which they regard rather in the light of a toy. For some it is a little rock garden, for others a small pond. The object of such a corner is to have a place on which to waste a lot of time and lavish any amount of care. The result is usually something very fascinating. Each plant takes on a personality of its own and is on very intimate terms with the gardener, who must, of course, be an amateur, no professional gardener could possibly afford the time involved to cherish and fuss all the little plants.

My little corner is a rock wall. It is only some 15ft. long and rather more than a foot wide. It runs along a little path by the side of the lawn and is only raised a few inches above the path on this side, but on the other there is a drop of from 1½ft. to some 3ft. to the drive, which slopes rather steeply downwards. My wall is made of flat country stone roughly cemented together with mortar. Along the top of the wall a shallow trench but a few inches deep is left, edged with stone and filled with good sifted soil. The drainage is thus perfect, and most of the common rock plants revel in their quarters and flourish amazingly. I have nothing uncommon or rare on my wall, and yet there is always something of interest on it. It is my endeavour to keep it gay with flowers from end to end from early spring to latest autumn. "How is this possible in so restricted a space?" you will ask. The method is very simple. Certain plants which dislike being moved have to remain on my wall all the year round, and do their best to beautify it with their graceful foliage or neat habit of growth. Others flower and are then carefully removed, and something else is popped into their place. It is really a most amusing game. The earliest flowers of all are those on the neat little cushions of *Saxifraga apiculata*, which have been a continual joy to me throughout the winter. The buds appear early in February, and by the end of the month the small green mounds look quite gay studded with their yellow flowers. Following closely on their heels a few *chionodoxas* and *scillas* open their little blue bells. Then a common little pink mossy saxifrage ventures out. But in the meantime the soil has been stirring at the other end of the wall and the little dark red leaves of the Apennine anemone can be observed pushing through with the buds pointing downwards and almost indistinguishable from them. Before you can turn round these have grown up into a bold clump with a show of lovely blue flowers. This encourages *Saxifraga Wallacei* to come into bloom, contrasting well with the blue of the anemone, which, alas! is already on the wane. This brings us to the first of May and the fritillaries have opened their snaky heads. *Saxifraga apiculata* has now been removed to summer quarters, and a charming little pink daisy, Dresden China, in full bloom, has filled the vacant niche on my wall. For weeks the buds of

*Gentiana acaulis* have been slowly forming, protected by a little penthouse made from a couple of old half-plates, for this plant dislikes the continual rains of our English winters. It is a long time to wait for the first streak of colour to develop



SEMPERVIVUMS NESTLING AMONG THE CRAGS  
IN THE ANNEXE.

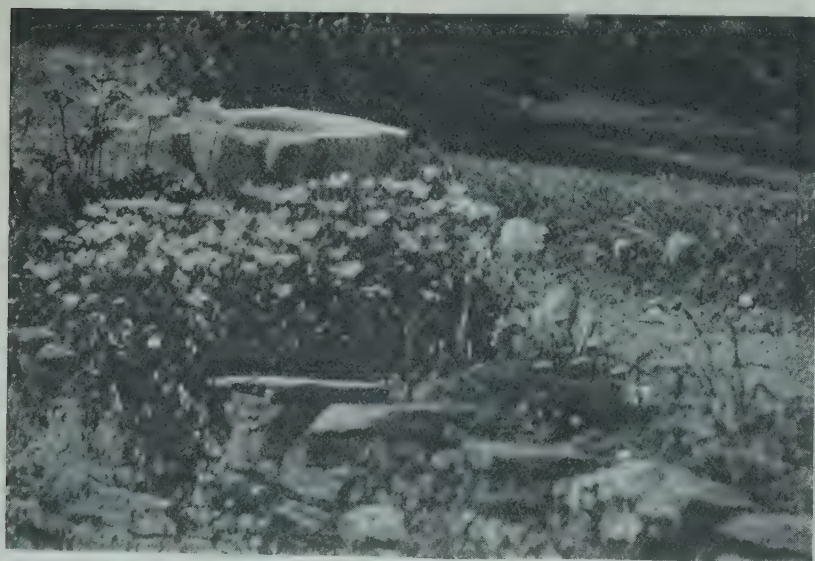
into the wonderful blue cups, reminding me of the Alps, where it grows so luxuriantly on apparently nothing but stones.

Next come two or three saxifrages of the London pride group, but not the London pride itself, as this is far too vigorous for my wall. These are the dainty little plants *cuneifolia*, *primuloides* and *umbrosa minor*. Quite common things, but each one with its own charm and grace. So many rock gardeners scorn to grow such common things, but I never could understand why. A lovely great hummock of thrift is now thrusting out its dark pink buds. No doubt its tap root has gone right down through the stones of my wall. After the saxifrages have had their day the campanula family carries on towards midsummer, when those lovers of the sun, the rock roses, give me a brave splash of colour. Only single ones are allowed on my wall, rather unruly members, they are inclined to want all the room for themselves, ousting the other plants growing near them. They have to be placed near a mossy mound of *Saxifraga serratifolia*, which is quite capable of looking after itself. They are useful, however, for their foliage remains throughout the winter to clothe the wall.

The year is brought to a close by the stonecrops, of which several fill in odd corners. *Sedum elegans* with its nice reddish foliage is a particular favourite of mine. It looks well all the year round and best when it throws up its yellow flowers, which contrast so well with the leaves. It has a very charming way of popping up between the stones where you least expect to see it. In the gap left by *Anemone apennina*, when this has died away, a seedling *viola* of some choice colour will go on flowering into the late autumn.

My wall has a continuation, a sort of annexe, on which the houseleeks in great variety fill the spaces between the granite and glistening quartz peaks. When grown like this they provide one with a source of interest which is never ending. Here are to be found those with the silky white threads spread from point to point of the little rosettes like a spider's web. It is a matter of common observation that this web is much more pronounced on the new growth in early summer. It is produced by the plant as a shield to ward off the intense heat of the alpine sun which might otherwise damage the tender young leaves. Here are also to be found quite sturdy rosettes of a glaucous green with pretty reddish brown tips, medium-sized rosettes, with the leaves beautifully curved outwards and those with the leaves tightly pressed together to form a compact ball—in fact, forms of almost infinite variety and colour. It is difficult to credit that they are all cousins of our common houseleek.

One of these sempervivums is sufficiently interesting to call for special mention. This usually goes by the name of "hen and chickens," from its habit of throwing off minute rotund rosettes which roll away from the parent plant to form



THE WALL IN EARLY SPRING, WITH *SAXIFRAGA WALLACEI*  
AND THE APENNINE ANEMONE.



the nucleus of a new cluster elsewhere, the future generation looking after itself in a most independent manner. In such quarters as my wall affords these plants are only too ready to throw up flower-spikes terminating in a cluster of dull pinkish stars, which are all very similar and to me uninteresting. They are produced, however, in rather a fascinating manner. One of the rosettes of a group slowly lengthens out until the stem is formed, the leaves of the rosette going to clothe this stem. Buds then make their appearance at the top, which duly open and then die away. But now comes the tragedy.

Where the flower was is now a dead rosette. When this is removed a nasty gap is left in the neat cluster, requiring time to heal the wound.

Though my walls are made of flat country stone, just because it happened to be there, there is no necessity to use stone. Bricks would do just as well, provided they were not too well put together or too elegant-looking. Of course, they would not have to be pointed. Old bricks would really be the best to use for this purpose. The old red colour might be even more effective than my grey stone.

EDWARD CAHEN.

## COTTAGE GARDENS

IN going about the country one often comes in contact with cottage gardens where many old-time flowering plants and shrubs find a home, and which convey the idea of their having been long established. The general arrangements of these gardens are such as to leave no shadow of doubt that they were not designed of late years, but were the outcome of work of earlier days; indeed, the impression which remains in the memory is that, apparently, the design and formation of the gardens which satisfied and pleased one generation was accepted by the next without any radical change being effected. You can scarcely fail to recognise such places when once you see them, as there is about them an old-time atmosphere—a sense of repose and quiet—that impels you to pause and admire, because they are something different from what is found in modern gardens. Some of these gardens may yet be met with, and not infrequently they are found in outlying villages, off the beaten track, as in the West Country under the shadow of the Cotswold or Mendip Hills. My mind reverts to one I visited years ago. It was partly surrounded by a yew hedge, the density of which indicated its antiquity, but good sense had been shown in that it was not too high to obscure vision of the road. The house itself, a stone structure, stood some distance back, so that most of the garden was visible from the windows. Stone, evidently of local origin, had been freely used in the formation of paths, for the edging of walks, and in building low walls. The great artist, Time, had weathered the stones in varying tints of amber and brown, and had also left its mark on the once grey tiles on the roof of the house. In a corner of the garden was a well, the only source of water supply, which had never been known to fail, built up about a yard above ground level, and lined with the same kind of hard stone. Covering the approach to the well, and visible for quite a long way down, polypodium ferns grew in profusion between the niches. Here and there the dense yew hedge had been cut in, leaving recesses for stout oak seats—nests for rest on summer days. One was not surprised to find box employed for edging certain beds on the lawn and some of the borders, but its regularity demonstrated that the shears had been used periodically, so much, indeed, that it was neat to a fault. My visit was in late spring, when laburnums were commencing to hang their trails of gold, and before the last of the flowering currants had disappeared. The borders attracted me greatly, as in them were clumps of crown imperials, of orange globe trolliuses and, what in these days one does not often see, Fair Maids of France (*Ranunculus aconitifolius*). Fading foliage of crocuses and snowdrops indicated where, earlier on, in company with chionodoxas and winter aconites, the first days of the year had been ushered in with beauty. In the self-same borders, the older type of Columbine alpina grew side by side with tree and herbaceous peonies; the thick coppery green shoots and leaves of the latter plainly spoke of roots having been undisturbed for years. Of lilies there were few, notably

groups of white Madonna, whose peerless blossoms at the time of their opening were enshrined by a background of dark fir. But there were other oft-called lilies in those borders that were at home—day lilies, for instance, like the hemerocallises, Peruvian lilies in alstroemerias, and those brilliant flaming spikes of autumnal days, torch lilies—the tritomas—which added glamour to the garden in the time of fast-falling leaves.



SWEET LAVENDER IN AN OLD-FASHIONED COTTAGE SETTING.

I noted clumps of delphiniums, that were called by the owner of the garden by their older name, larkspurs, and dielytras and campanulas with pinks and rockets were given places of honour.

Here were hedges of sweet briar, bushes of lavender and rosemary, and thymes and other herbs in variety. Some of the bushes were of a size as to leave no doubt of their having reached a good age, and, to account for this, one could not help thinking that not only the soil, but the clear, unvitiated atmosphere of the countryside explained the vigorous growth. Of creeping and climbing plants there was a limited number. The garden arch, with rambler roses, was not to be seen, but round the doorway and over the walls of the house not occupied by branches of Victoria plums, white and yellow jasmines and a wistaria clambered. The porch itself was clothed with honeysuckle. It was a garden that tempted one to linger, because among the plants and flowers found growing within its enclosure one became conscious of a subtle charm—nay, it was even more than this, for it was typical of an old and fast disappearing style of an English garden, about which, as you reluctantly left it, you could not help saying, "How very nice it all is."

W. LINDERS LEA.



# THE CANADIAN KEW

BY GEORGE SIMPSON.

CANADA abroad, especially in Great Britain, is thought of as a land of illimitable spaces and fertile plains, "the granary of the world," and not particularly as a land of fruit and flowers. Yet Canada, by reason of the wide range of its climatic and atmospheric conditions, is singularly adapted to the cultivation of a great variety of fruiting and flowering plants. Commercial horticulture has established itself upon a firm basis in such widely separated regions as the Annapolis Valley of Nova Scotia, the Niagara district of Ontario and the Okanagan country in British Columbia, not to mention numerous other localities where fruit-growing is carried on profitably.

Thanks to the exertions of voluntary societies, ornamental gardening is making rapid advances in urban and rural Canada, especially in the provinces of Ontario and British Columbia. The proportions to which this steadily growing movement has attained will be appreciated when it is stated that the membership of the Ontario Horticultural Association, a federation of local horticultural societies, has reached a total of almost sixty thousand adult amateur gardeners—this in one province only. Governments, provincial and federal, have taken note of the movement and are supporting it, not only by direct money grants, but by the maintenance of botanical and horticultural gardens and of horticultural teaching in universities, colleges and schools.

Chief among the agencies for the dissemination of horticultural knowledge is the Horticultural Division of the Dominion

proclaim their merits and promote their cultivation, and they are honoured, like the rose, by being made the subjects of special shows.

The rose, too—principally the hybrid tea and Pernetiana—has its devotees, and at the Farm will be found almost everything worth while and some things not at all worth while, because the Farm takes the risk of trying out unknown varieties, thus saving the individual that trouble and expense. Roses originated by the principal growers in England and Ireland are planted in large numbers and it is astonishing how quickly the great majority adjust themselves to the changed conditions of their new home, proving that the rose is not only a hardy, but an exceedingly adaptable plant. Even the teas, with careful winter protection, come through, but the casualties in this class are great. The Farm is looked to for information not only in regard to the growing of roses, but also in regard to methods of winter protection, because it is only the rugosas and other hardy species that will survive the winter without covering. No attempt is made to prevent the rose bushes freezing, but the aim is to keep them dry and to restrain growth in the spring until weather conditions are such that it may proceed without interruption. All feasible methods of protection are experimented with and the results published for the information of rose growers. The two plans that have proved most successful are (1) laying the rose flat, covering with dry leaves and placing over all a roof made of two boards



A BORDER OF SUMMER FLOWERING ANNUALS.

Experimental Farms, and it is at the Central Experimental Farm at Ottawa that we have what we sometimes call our Canadian Kew. Research and experimentation in subjects having commercial applications are carried on by staffs of experts, but our concern here is with decorative gardening as it appeals to the average private gardener seeking to improve his home surroundings, to indulge a hobby or pursue a speciality. In the academic sense gardening is not taught, but its practicable phases are illustrated in the extensive plantings within the horticultural limits as distinguished from the purely agricultural areas of the farm and also in the well stocked arboretum. The general gardener will be instructed by examples of well arranged perennial borders containing the principal varieties of hardy herbaceous plants suitable to Eastern Canada; summer-flowering annuals in effective groupings and especially by the great variety of hardy flowering shrubs and trees that thrive under the somewhat trying conditions encountered in the Ottawa Valley.

The specialist will find available for study and comparison most complete collections of *Iris germanica* and hybrid herbaceous peonies. These outstanding plants are especially adapted to Canadian conditions; they are largely planted in private gardens, a society has recently been organised to



THE IRIS WALK AT THE EXPERIMENTAL FARM.

nailed or hinged to shed water, or (2) covering the recumbent bushes with dry leaves, and over this placing evergreen boughs to check winds and hold the snow; because, after all, snow is nature's own protecting material and is effective provided it comes in quantity before a hard frost and remains until settled conditions return in spring. But the snowfall may not come until after severe freezing weather in December and following its disappearance in March a cold spell may do irreparable damage to the new growth. Hence the necessity for artificial protection.

The cult of the gladiolus—perfectly suited to Canadian summer conditions—is hard pressed in the effort to keep pace with the rapid multiplication of varieties. Thousands are grown at the Farm under conditions that facilitate comparison; and, that the information derived from these plantings may be distributed as far afield as possible, educational exhibits of cut blooms are staged at the principal agricultural, horticultural and industrial shows.

Does the home gardener contemplate the planting of a hedge? Many specimen hedges, deciduous and evergreen, are placed side by side, clipped and tended, ready for inspection, each disclosing some point of superiority or suggesting its suitability for a special use or position.



A good deal of original work is being done in plant hybridisation, and some outstanding results have been obtained, notably in the production of the roses Mary Arnott and Agnes, the chrysanthemum J. R. Booth, an enormous yellow bloom, and a dozen or more greatly improved varieties of geraniums. The extensive conservatories stage a chrysanthemum show in November that attracts visitors in thousands and does much to acquaint the non-gardening public with the horticultural resources of the Farm.

To many the most interesting part of the Farm is the arboretum, where are collected the principal native and exotic trees and shrubs hardy in Eastern Canada. These are the survivors which have stood the test and can be recommended to Canadian planters with assurance; but, in the almost forty years of the Farm's existence, everything that gave promise of success has been tried—many shrubs and climbers that are accepted as commonplace in the gardens of England—and there have been casualties without number. Failures and successes have been noted and the printed record is at once a warning and an encouragement, because it shows what to plant and what to avoid. In the arboretum there is a perennial border half a mile long containing a fairly complete collection of indigenous and foreign hardy plants, and including less known dwarf perennials suitable for the edging and the rock garden. Many of these dwarfs are grown from seed obtained from abroad, because the Botanical Division which has charge of the arboretum maintains a correspondence and seed exchange with the great botanic gardens of the world.

Obviously, results obtained at Ottawa, where winter temperatures drop—very occasionally—to 20° below zero or lower and where summer temperatures rise—also very occasionally—to above 90°, would have little or no meaning for the gardener at Victoria, British Columbia, where conditions similar to those in the South of England prevail and where the early spring bulbs come into bloom in February, while the gardens in Eastern Canada slumber on under their protecting mantle of snow. Nor would these results be applicable to the severe conditions of the prairie regions, where winter temperatures are sometimes low and the snow covering light. Because of these climatic variations some thirty branch farms, stations and sub-stations, have been established in different parts of



A FINE DISPLAY OF BLOOM IN THE CHRYSANTHEMUM HOUSE IN NOVEMBER.

the country and at nearly all of them horticultural work is carried on and demonstration plantings are maintained. An interesting detail in connection with this local and specialised experimentation is the work that has been done at Sidney, British Columbia, to demonstrate the practicability of bulb production on a commercial scale on the Pacific Coast and particularly on Vancouver Island. Darwin tulip bulbs of high quality have been grown showing that the question is economic rather than cultural. The mildness of the climate has made it possible for the Sidney farm to draw upon the world for its unique collection of flowering plants and shrubs, including many semi-tropical varieties that could not survive in other parts of the country. Rhododendrons and ericaceous plants generally do well here and roses yield their blooms in continuous succession from May to December. On Vancouver Island the English gardener is perfectly at home.

## GARDENS OF HEALING.—III

THE Health Garden can be beautiful as well as useful and interesting, for many of our flower favourites have an honoured place among the plants endowed with beneficent qualities. In fact, something of everything can be included in the medical garden. If a field were set apart for the purpose, trees and vegetables with healing properties, as well as herbs, fruits, flowers and some plants which we now designate as weeds could be included.

### LILIUM CANDIDUM.

Much care is given to the cultivation of the Madonna lily on the Continent for its beauty and also for its medicinal properties. Nothing is perfect here below, and the Madonna lily has its faults. Its scent, alluring and delicious in the garden, is harmful in a room and gives rise to severe headaches and even syncope. The petals should be handled lightly, collected as soon as the flowers expand, and dried slowly in the dark. They are then steeped in brandy for a week or two. This decoction is used to heal cuts and bruises and to stop excessive bleeding of the former. The bulbs are dug up in the late autumn and stored in sand in a dry cellar. They are mixed with lard and boiled in milk, or cooked on ashes and applied as hot poultices

for chest complaints and to assuage all violent pains.

### PRIMULA VULGARIS.

Stuffy colds in the head are quickly relieved by primrose roots gathered during the winter, dried and reduced to powder and then mixed with honey or boiled in wine. Chronic headaches may be treated with the same medicine.

Infusions are made both with primrose leaves and flowers. The former allays feverishness and the latter is used extensively in France for biliousness, indigestion and nervous disorders, such as St. Vitus' dance, epilepsy and palpitations.

Boiled primrose leaves applied when very hot speedily relieve rheumatism.

### CONVALLARIA MAJALIS.

The rhizome of the lily of the valley is used in pharmacy as an emetic, and an infusion of the flowers (1oz. to a pint of water) is a valuable lotion for inflamed eyes or for earache. A snuff made from the powdered flowers relieves headaches.

### VIOLA ODORATA.

The sweet-scented violet is one of the most wonderful of plant healers, and seems to be coming into its own again even in England, where we so greatly

ignore the virtues of our native plants. It is amazing that its properties are known only to the few.

Some eminent medical men do not deny that an infusion of violet leaves is a great aid in lessening the pain of that distressing malady, cancer. Cases have been known where, in its early stages, that disease has been arrested by applications of violet leaves. In Ireland everyone knows this, and violet leaves are universally used for this complaint. Quite recently I have been told of undoubted benefit being derived from this simple remedy in a case where the disease was far advanced. On the Continent, too, such poultices are used, not only in cancer cases but to cure sores, bruises and inflammation.

An infusion made from violet flowers is a soothing drink. It is a remedy for colds, coughs and bronchitis, and stays irritation in rash diseases. This is in use in many country places in Britain.

In Arabia and Egypt, crystallised violets are served with coffee as an aid to digestion.

One of the choicest wines of the ancient Romans was made from violet petals, and both they and the Greeks wound wreaths of violet leaves round their heads as a cure for severe headaches.

VICTORIA SLADE.



# IRISES AT VINCENT SQUARE

THE beautiful collections of irises were the predominating feature at the fortnightly meeting of the Royal Horticultural Society at Vincent Square Hall on June 9th and 10th last. Peonies were noted as the main item in the syllabus, but these were conspicuous by their almost total absence save for a few exhibits. It is certainly strange why this flower is not grown more in this country than it is. In America, widespread interest is taken in its cultivation; horticultural friends over there are doing their utmost to kindle our enthusiasm, but apparently to no avail. The Show was a representative one and presented a magnificent blaze of colour, such as only early summer and the glorious weather of the preceding days can produce.

Messrs. Kelway's name is well known throughout the horticultural world, and more especially in connection with peonies. They fully lived up to their high reputation by the exhibit which they put up. The large blooms of almost all shades provided a vivid splash of colour. Among the single-flowered varieties we noted R. W. Marsh, with petals of a fine colour of bright chocolate-crimson; Victor Hugo, with fair-sized handsome blooms well carried on good stems. The spreading petals were of a rich deep blood crimson shade. While in the choice double-flowered forms we found Lady Stradbroke, with huge heads composed of soft pink petals; Kelway's Rosemary, of a soft rosy pink shade with a tuft of lighter petals in the centre and with a haunting fragrance. This is a most attractive variety. Another sweetly scented variety was Helen Glover, whose many rather short petals of a light rose, almost flesh-coloured, shade give the flower a characteristic appearance.

Another fine exhibit was that staged by Mr. K. Gifford, Hornchurch. This consisted of sprays of *Pæonia albiflora grandiflora* in vases. The blooms were large and handsome, fully 6ins. across. The appearance of the flowers is enhanced by the large cluster of golden stamens in the centre of each, which stand out like a miniature pin-cushion. It presented a most striking appearance when seen in the mass.

Mr. J. C. Allgrove was also showing a few species and varieties, such as *Pæonia Delavayii* and *Veitchii*, both characterised by their dissected foliage and small yet nevertheless handsome flowers. *Pæonia The Bride* was also shown and attracted considerable attention. They were shown off to advantage by the huge spikes of *Eremurus robustus* Magnificent, which acted as a fine background to Mr. Allgrove's stand.

Irises formed the chief exhibits. Magnificent collections were shown by a number of firms, and the tall spikes of bloom in blue, purple and yellows greatly added to the floral display. From these groups the garden value of the iris could be well appreciated. Some of the newer varieties, especially those not yet named, were singularly beautiful. The texture of the petals, the general shape and form of the flowers, as well as the colouring, was remarkable compared with the garden iris of twenty years ago.

Messrs. Wallace had an excellent exhibit of some of the finest varieties grown in their iris fields at Tunbridge Wells. *Souvenir de Mme. Gaudichau*, with large violet standards and velvety purple falls, was one of the most striking of the neglecta section. *Lent A. Williamson* was a variety of great size, with flowers formed of soft lavender standards and velvety purple falls, on which bright golden beards made a pleasant contrast. *Pioneer*, one of the best reddish purple irises raised recently, had a bright golden beard on the glowing purple falls, and is a

variety of vigorous growth. *Queen Caterina*, a pale lavender-violet self; *Shekinah*, a lemon-yellow; and the beautiful variety, *Ambassadeur*, with its reddish-violet standards and velvety brown falls; *Gold Crest*, *Sindjkhat* and *Leonato*, are only a few of the handsome irises exhibited by Messrs. Wallace. This firm were also showing *Prospero*, *Dora Longden*, *Gules* and *Roseway*.

Among the collection of irises from the Orpington Nurseries were some interesting varieties—*Evadne*, a sweetly scented rose-red self, was a well branched variety. *Harmony*, a rich violet blue self; *Gabriel*, with clear lavender standards, and falls of light violet-blue, deeper at the haft, stood out from among the rest. *Asia* was a distinct iris, strong in growth, with suffused and reticulated lavender standards and light purple falls heavily reticulated at the haft. *Imperator*, *Red Admiral*, *Zulu* and *Tenebrae* were much admired; while *Quaker Lady* and *Fro* appealed to many.

Many noteworthy varieties were shown by Messrs. G. Bunyard and Co., and considerable care in culture must have been expended to produce such perfect specimens. It was difficult to choose a representative list from such a fine collection, but among them were *Monsignor*, a tall bearded iris with satiny violet standards and crimson-purple falls; *Mdlle. Schwartz*; *Tristram*, with clear white standards and deep rich purple falls heavily veined; and *Ed. Michel*, a wine-red self. *Souvenir de Mme. Gaudichau*, *Ambassadeur*, *Ann Page*, *Crusader*, *Dalila* and *Mercedes* were also shown.

One of the most striking of Mr. Amos Perry's irises was *Mrs. H. F. Bowles*, a variety introduced by the exhibitor. It is of a colour difficult to describe accurately, the general effect being rich brownish red, formed by soft brown standards overlaid with old gold and brick-red falls. *Abenda* possessed some beautiful bronzy shades; and *Olympus* was good both in size and form. *Geneva*, *Dejah*, *Marjorie Tinley*, *George Yeld*, *Mrs. Marion Cran* and *Mrs. W. Cuthbertson* were all well displayed. Among the bearded irises was a group of that beautiful sky blue Siberian iris, *Perry's Blue*.

Messrs. Lowe and Gibson had some sweetly scented varieties among their meritorious exhibit of irises. *Rodney*, one of the bluest of the irises; the dainty *Camelot*, *Eldorado*, and the handsome flowers of *Ed. Michel* were conspicuous. Most effective was the variety *Crusader*, with standards of clear lavender blue and falls of deep violet. *Dimity*, *Azure* and the popular *Prosper Laugier* were also exhibited.

One of the most attractive irises exhibited by Messrs. Waterers was *Sweet Lavender*, a strong-growing variety of a beautiful rosy mauve shade. The standards were pale lavender, and the widely expanded falls a deep rose-lavender. *Cluny*, a magnificent variety belonging to the pallida section; *Drake*, a pale blue; *Memory*, and *White Queen*, were all beautiful. The number of blooms on each spike, and the texture of the petals of Messrs. Waterers' irises were exceptionally good.

It was difficult to know where to begin and where to end when making a selection from Messrs. Barr and Sons' splendid exhibit of irises. Groups of flowers of all shades adorned this stand. Some of those belonging to the variegata section were very lovely. *Prince of Orange*, with rich golden standards and brown falls veined with orange, together with *Lorely* and *Mithras*, were typical of this class. Such varieties as *Red Cloud*, *Her Majesty*, *Stella*, *Tamerlane* and the fragrant *Ringdove* were seen on this stand.

Mr. George Whitelegg also exhibited irises of all kinds. *Empress of India*, a fine variety

of pallida form; the tall-growing *Asia*, which, although unusual, is yet effective; *Halo*, *Opera* and *Nibelungen* were a few of those particularly suitable for grouping in the iris garden.

Messrs. Dobbie and Co. of Edinburgh put up a fine exhibit of long-spurred aquilegas in all colours. These were set out in fibre so as to produce the most natural garden effect possible. By such a method of arrangement one can recognise at once the garden value of these beautiful columbines.

One of the best colour effects in the Show was that produced by Mr. H. J. Jones' stand of hydrangeas. Years of cultivation, selection and rejection have had the desired result of producing some of the finest varieties of this flower which we have ever seen. The blending of the colours was excellent—shades of pinks, blues and mauves relieved by dashes of white. A few of the notable varieties on view were *Rhinegold*, of bushy habit and carrying large trusses of rich pink flowers; *Rubis*, which may be said to be a new variety, bearing well shaped trusses of bloom tinged with almost a reddish shade; *Niedersachen*, carrying large trusses of a blue to mauve colour, a most attractive variety; *Germaine Mouillere*, a pure white variety with glossy foliage. The flowers are fimbriated and are borne in fine large handsome trusses. All these varieties are first-rate plants for interior decoration, and Mr. Jones is to be congratulated on the excellent results which he achieves in the cultivation of this genus of shrubs.

An attractive subject for exhibition purposes was *Crassula coccinea* minor, staged by Baron Bruno Schröder. It looked remarkably well in the mass, relieved by the greenery of decorative foliage and backed by a few clumps of lilies. This is a robust and shrubby plant which, judging from the specimens shown, reaches a height of about 12-18ins. The leaves are ovate in shape and very closely imbricated, and about 1-1½ins. long. The bright scarlet and slightly fragrant flowers are borne in numerous dense heads, and the plants were very floriferous. They were all well grown, and great credit is reflected on the head-gardener, Mr. E. J. Henderson.

That the season for rhododendrons is not yet over was evidenced by the fine exhibit of hybrids staged by Messrs. Waterer Sons and Crisp. Among many of the fine varieties were to be seen *Lady C. Mitford*, *Bagshot Ruby*, *Donald Waterer*—a new variety, carrying rather flat trusses of rosy pink-edged flowers; *Philip Waterer*, also a new variety, bearing large shapely trusses of large delicate rose-pink flowers of a good form; and a number of hybrids of *R. discolor*. It would appear that there is no end to the ever increasing number of hybrid rhododendrons which are entering into cultivation, and it is remarkable how high a standard is reached in the production of these new forms, as was evidenced by this exhibit.

A new arrival in the world of carnations was also to be seen at the Show. This was a new perpetual-flowering variety, named *Mrs. Vlasto*, exhibited by Mr. J. C. Beck of Henley. It appears to be of a good strong constitution, bearing well shaped blooms of a shade of petunia and white on tall wiry stems. The calyx is firm and of perfect shape, while the blooms have that excellent fragrance reminiscent of an old clove variety, only in a slightly stronger degree.

The lupins exhibited were truly wonderful. The strength and length of the spikes, and the great variety of art shades which are now obtainable, greatly add to the value of this useful border plant. Undoubtedly, one of the most popular lupins of to-day is *Downer's Delight*, which was shown by nearly every



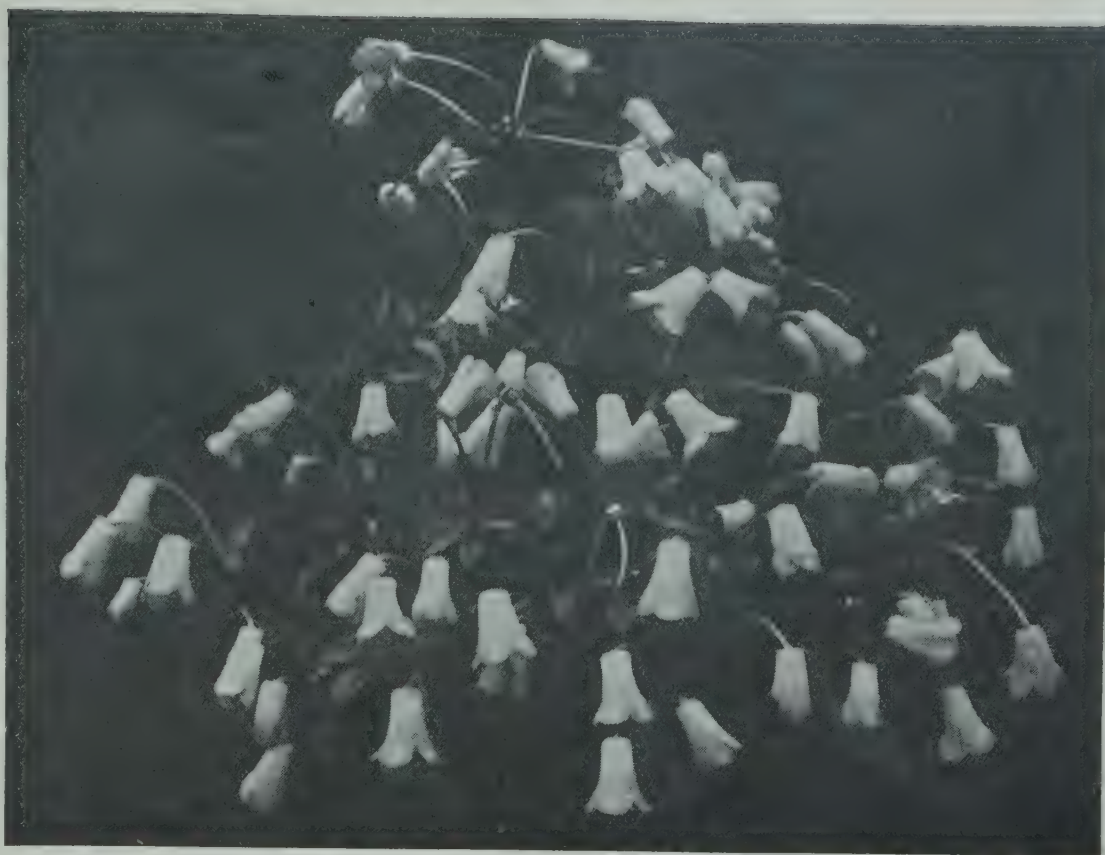
firm exhibiting lupins. In each case it was perfect, both in colour and form. Sunshine, Pink Pearls and Cross Roads are three other favourites.

Mr. G. R. Downer was showing some of the best of his famous lupins, including May Princess, Red Star, Artist, Nublu, and the beautiful white Snowfall. Mr. T. Carlile had some varieties of his own raising among his collection. Lodden Bridesmaid is one of his recent introductions, and is a pale lemon variety with pale lavender keels. 21st Lancers (one of the strongest growing of all lupins and of unusual colour), Milly, Tunic, Apple Blossom, Happiness and Queen of the West were the most conspicuous of this exhibit.

The Maytham Gardens had a special strain of seedling lupins which were vigorous in growth and clear in colour. Maytham Sunrise and Maytham Elegance, a deep pink and a deep blue, were two of the best. Messrs. Harkness and Sons were showing lupins of glorious shades, such as Captivation, Joy, Pink Progression and Annie Myers. An interesting collection of hybrid seedlings in a wide range of colours was shown by Mr. H. Marcham. It illustrated the great value of the newer shades of lupins. Rose Bedder, King of the Blues, Brenda, Mount Everest and Afterthought could be seen among Mr. Maurice Prichard's exhibit. Lupins were also shown by Messrs. Bakers and Rich and Co.

For excellence in arrangement and quality of the flowers, the exhibit of sweet peas by Messrs. R. Bolton and Son was most noticeable. Large bunches of vivid-coloured flowers borne on long stems formed a brilliant array. The number of varieties selected was not great, but those exhibited were some of the best. The novelty of outstanding merit shown by this firm is Gold Crest, a pinkish salmon, a beautiful colour in artificial light. Peggy, Royal Pink, Ivory Picture and Black Bess (one of the darkest of all sweet peas) were other new varieties shown by Messrs. Bolton.

Messrs. Alex Dickson and Sons of "Hawthorn" fame had a varied and good collection of sweet peas. Many of the old varieties as well as several novelties could be seen. A splendid new variety was Crusader, a



ONE OF THE FINEST OF ALL DWARF RHODODENDRONS. *R. MYRTILLOIDES*.

lovely orange-salmon. Mermaid, a sweet pea raised by this firm, is a soft lavender very similar to Powerscourt. Stella, a large cream with a definite rosy margin; Blue Bird, Purple Perfection and Royal Scot were all striking varieties.

The alpine section seemed to feel that it was the day of the border plants, but there were several very interesting plants in the rather meagre and diminished exhibits.

Messrs. Reuthe showed *Conandron ramondoides*, the Japanese "mountain tobacco," that promised to be a valuable rock plant, but failed to be sufficiently hardy. It might do well in the warm West Country, and its dark lavender flowers with a golden-brown eye, like a waxy and

refined potato blossom, are worth a little trouble.

Messrs. Tucker showed *Epilobium macropus*, a New Zealander and one of the best of willow herbs for the rock garden, for it is not a pervasive ramper like so many of its family, but makes a neat mat of rather bronzy leaves and covers it with pearly white flowers on dark red stems; *Linum collinum*, Seedling No. 2, a form that preserves the deep blue which distinguishes *L. collinum* from *L. alpinum*, but is more upright and compact than the type; *Papaver pyrenaicum*, in its orange form, which suffers with the other alpine poppies from being regarded as no more than a miniature Iceland poppy, though they are all high alpinists, typical scree plants and quite individual in their grace and brilliance; *Aquilegia concolor*, which seems to be a neat, dwarf form of *A. pyrenaica*, carrying its pale lavender flowers rather more upright.

Messrs. Maxwell and Beale showed *Dryas Sundermanni*, the hybrid between *D. octopetala* and the yellow *D. Drummondii*, but their plant had large, pure ivory white flowers instead of the straw yellow ones of the usual form and seemed altogether more attractive; Farrer's *Campanula Miranda*, a curious plant with flowers that are as nearly grey as any in the garden, and enormous against the tiny leaves; *Lithospermum intermedium*, that in its own home looks like a tuft of gentian-blue heather and likes a really warm dry spot in this climate; *Matthiola fenestralis*, a neat little stock in faded purple that looks very well with *Onosma tauricum* and appreciates the same conditions.

The Hemsley Nurseries showed *Cyananthus incana leiocalyx*, a curious and beautiful alpine from Yunnan with long prostrate shoots, each carrying a single starry blue flower covered with long silky white hairs faintly tinged with gold; a variety of *Geranium argenteum* with flowers deep red instead of the usual pink, and contrasting sharply with the silvery green of the neat rosette. In the background were some plants of a white *anchusa* raised by the firm and, although blue is rare in the garden and white is common, yet this albino, besides serving as a foil to show up the type, has a certain frosty beauty of its own. Beside it was the



THE HANDSOME BLOSSOMS OF *CISTUS LADANIFERUS IMMACULATUS*.



monstrous foxglove that produces a huge single petunia upright on the top of its ordinary spike of flowers. It is strongly recommended to lovers of the curious.

Among the other exhibits were the following:

*Ageratum*.—Messrs. Dickson and Robinson.

*Alpines*.—Messrs. Bakers, W. H. Rogers, Skelton and Kirby, F. K. Wood.

*Antirrhinums, Clarkias, etc.*—Swanley Horticultural College.

*Carnations and Pinks*.—Messrs. Allwood Brothers, C. Engelmann, C. H. Herbert, Stuart Low and Co.

*Clematis and Other Shrubs*.—Messrs. L. R. Russell and Co.

*Greenhouse Plants*.—Messrs. Stuart Low and Co.

*Herbaceous Plants*.—Messrs. Blackmore and Langdon, J. C. Allgrove, Bakers, Chalk Hill Nurseries, Harkness and Sons, K. and E. Hopkins, G. A. Miller, B. Ladhams, Rich and Co., Skelton and Kirby, W. Wells.

*Lupins*.—Messrs. J. Cheal, Hemsleys, Harkness and Sons, Dickson and Robinson.

*Orchids*.—Messrs. Sanders and Stuart Low.

*Pelargoniums*.—Messrs. Godfrey and Son.

*Roses*.—Messrs. George Prince and J. H. Pemberton.

### NEW AND RARE PLANTS.

*CISTUS LADANIFERUS IMMACULATUS*.—This is a beautiful pure white unspotted form of the species sometimes known as *albiflorus*. The flowers, almost 4 ins. across, with broad white petals slightly crimped at their margins, are borne solitary at the end of the slender side branches. Award of merit. Shown by Sir William Lawrence.

*RHODODENDRON MYRTILLOIDES* WARD 3172. —One of the rare species of this genus, largely owing to its late introduction and from its appearance, it is one of the finest of all our dwarf rhododendrons. It is a dwarf shrub reaching about 6 ins. high, bearing numerous solitary flowers which resemble waxen bells of a firm texture. In colour, they are of a light pink to plum colour and inside a shade of reddish white. Award of merit. Shown by Mr. Lionel de Rothschild.

*ECHIMUM WILDPRETII*.—This species is a native of the Canaries and is not hardy in this country. It is a tall soft hairy biennial with simple erect stems reaching a height of about 3 ft. It is very floriferous, bearing numerous pale dull red flowers, the colour

of which is relieved by the exerted filaments, in a long terminal spike. Award of merit. Shown by Mr. Charles T. Musgrave, Godalming.

*RHODODENDRON MRS. WILLIAM WATSON*.—An attractive hybrid, carrying loose trusses of white flowers blotched with reddish crimson. The trusses of bloom are carried well up from the foliage. The individual flowers are about 2 ins. across. Award of merit.

*RHODODENDRON MRS. A. C. KENRICK*.—This variety carries loose trusses of pink-edged, prettily crisped flowers, the colour shading to white in the throat. The petals are slightly blotched. Award of merit.

*RHODODENDRON LADY DE ROTHSCHILD*.—The whitish to pink flowers, almost 2½ ins. across, of this hybrid are carried in loose trusses standing out from the dull green of the foliage. Blotches of a dark maroon shade occur on the petals. Award of merit. These three hybrids were all shown by the executors of the late Anthony Waterer.

*RHODODENDRON IDA WATERER*.—This attractive variety carries fairly large, frilled flowers of a violet-rose tint.

*RHODODENDRON TED WATERER*.—The wide, rather flattened blossoms of this form are white in colour, tinged with lavender at the edges. On one of the petals blotches of yellow occur.

*RHODODENDRON DISCOLOR HYBRID*.—This is a showy variety, carrying expanded, long tubed flowers of a rich pink colour. The petals are frilled.

*RHODODENDRON MONSTROUS*.—The large trusses of the handsome rose-pink blossoms undoubtedly give the varietal name to this hybrid. The flowers vary a little in colour.

The above four hybrids all received awards of merit, and were shown by Messrs. Waterer, Sons and Crisp.

*SALVIA HARRINGER*.—This appears to be a fine variety for summer bedding purposes, being sturdy and carrying large spikes of handsome scarlet flowers. Award of merit. Shown by Messrs. Watkins and Simpson.

*CARNATION FROYLE BEAUTY*.—This is a fine border variety, with blooms of a salmon-apricot shade. Award of merit. Shown by Mrs. P. B. Summers, Froyle Place, Alton.

*HEUCHERA PINK DELIGHT*.—This does not appear to carry any distinctive marks from other varieties, unless it be its rather tall, graceful habit. Shown by Mr. G. Miller.

*PYRETHRUM AVALANCHE*.—This variety carries large single, almost pure white save for a pinkish tinge, blooms, 3–3½ ins. across. Some of the individual blooms carried four rows of petals, while others had only two. The flowers were well carried on tall and fairly erect stems. Award of merit. Shown by Mr. H. Robinson, Hinckley.

*HYDRANGEA NEIGE ORLEANAISE*.—This variety certainly represents a distinct advance in white hydrangeas. It is of a good pure white, of neat habit, with bright green foliage, while the trusses of flower are really immense. Award of merit. Shown by Mr. H. J. Jones, Lewisham.

*HYDRANGEA PASTEUR*.—Another excellent new variety carrying huge trusses of large almost salmon pink flowers, shading to a deeper tint in the eye. The trusses are oval in shape and about 15 ins. across. Award of merit. Shown by Mr. H. J. Jones, Lewisham.

*AGERATUM LITTLE BLUE CLOUD*.—This is a small and compact variety of neat and attractive habit, reaching a height of about 4–6 ins. It is very floriferous, carrying numerous flower heads of a pure shade of blue. Award of merit. Shown by Messrs. Dickson and Robinson, Manchester.

### ORCHIDS.

*MILTONIA VEXILLARIA RAJAH*.—A remarkable form of this well known plant, the rose-tinted flower having an unusually large crimson-purple blotch on the labellum. It had been obtained by crossing a typical form of *M. vexillaria* with the variety called *G. D. Owen*, the latter distinguished by a blotch of similar colour, but not covering so extensive an area. Award of merit. Shown by Messrs. Black and Flory, Slough.

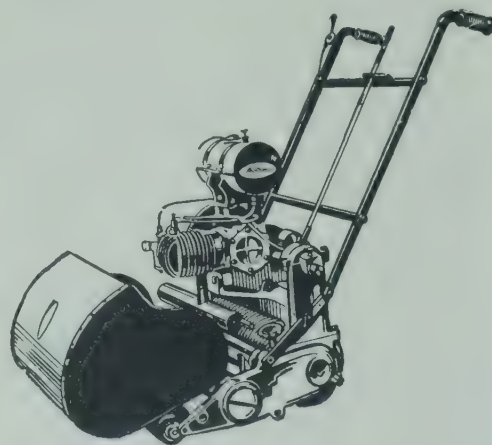
*ODONTOGLOSSUM CRISPUM* VAR. *RENOWN*.—A garden-raised plant of this Colombian species. The spike bore six large flowers, the segments broadly developed, white except for a reddish blotch on the centre of the labellum. Award of merit. Shown by Mr. J. J. Bolton, Claygate, Surrey.

*ODONTIODA OPAL*, *GERRISH'S VARIETY*.—An immature seedling obtained by crossing *Odontioda Cooksoniae* with *Odontoglossum Eximillus*. The single flower, of deep rose tint heavily blotched with reddish scarlet, the labellum deep rose and with a red blotch near the yellow crest. Preliminary certificate. Shown by Mr. R. Gerrish, Milford Manor.

## MOTOR MOWING MACHINES

THERE is no more arduous task in the garden than the mowing of the lawn, and any inventions which enable this work to be carried out quickly, cheaply and with the minimum amount of labour are bound to make a strong appeal to the public. The power-driven mowers now on the market are the result of the most exhaustive tests and experiments on the part of the various manufacturers and for those fortunate, or in some cases unfortunate, folk who possess large estates, the modern motor mowing machine is almost to be regarded as a necessity. The English climate certainly has many faults, but as long as cultivation is not neglected, the abundant rainfall and absence of tropical sunshine are largely responsible for producing the most beautiful lawns in the world. Except during periods of severe frost or when the ground is water-logged, the grass should be mown regularly all the year round, and, thanks to the

help of the motor mower, this work can be done rapidly and efficiently. There will soon be few cricket, tennis



THE "AUTOMO," A LIGHTWEIGHT MACHINE

and golf clubs which are not provided with these machines. Improvements and extra refinements will, of course, be adopted each year, and both makers

and garden owners eagerly look forward to the production of a light but strong machine, the price of which will be sufficiently low to encourage anyone who has a small lawn to purchase one and thereby be able to feel in future that grass-cutting is a pleasure rather than a labour. The Royal Horticultural Society is to be congratulated on organising an official trial of motor mowing machines, but it would be far better another time to arrange for trials to be carried out, if possible, on some private lawns, as the grounds where the trials were held in Regent's Park were far from ideal for the purpose. Not only was the grass rank and coarse, but the ground was, in places, very uneven, and in one case, at least, the operator in charge of a machine only just stopped in time to avoid running over a large piece of broken brick. The trials were of great interest, inasmuch as most of the leading makers were represented, but they could hardly be regarded as a



# ALLEN'S NETS Garden & Tennis Netting

anned, small mesh, 25 x 2, 4/-; 25 x 4, 8/-; 50 x 4, 25 x 8  
16/- Superior quality, nearly new, repaired, 2-inch  
nd nets, 25 x 13 yards, 42/6; 3 nets, 126/- 50 x 13, 85/-;  
£12 13s. 9d. 75 x 13 yards, 125/-; 3 nets, £18 14s. 0d.  
-inch square mesh nets, bound with cords, 5d.; 1 inch,  
square yard; cover full area. New Tennis Boundary  
g, stout twine, 6 ft. high, 1/1; 7 ft., 1/5½; 8 ft., 1/8;  
1/10½ yard run. Melon Nets, Pea Nets. See price list.  
action guaranteed. Despatch promptly. Carriage paid  
per train; receipt order.

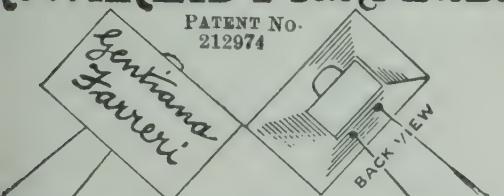
**OLIVER ALLEN & SONS,**  
Net Makers,  
**POROTHLEVEN—CORNWALL.**  
Telegrams: Oliver Allen, Porthleven.

# ROUGH OF HARROGATE

## arks and Gardens Superintendent

Harrogate Corporation invite applications for the above  
atment at a salary of £350 per annum.  
idates should be trained and skilled gardeners, with a  
cal experience of Public Gardens, Landscape Gardening,  
houses, etc., and be accustomed to the supervision of  
en.  
ist of Duties can be had on application.  
lications in own handwriting, stating age, full experience,  
resent occupation, accompanied by copies of not more  
three recent testimonials, to be delivered to the under-  
not later than the 29th June, 1925.  
vassing directly or indirectly will disqualify.  
C. E. RIVERS, A.M. Inst. C.E.,  
Borough Engineer.  
ipal Offices,  
Harrogate.  
June, 1925.

# Wizard Plant LABEL



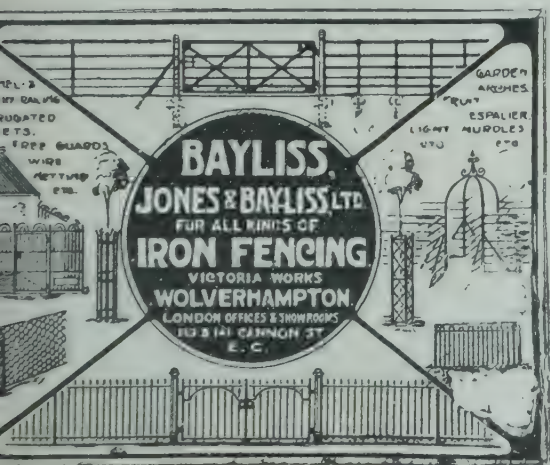
MADE IN RED POTTERY. 2½ x 1½ ins., with rustless wires.  
12 in., 2/- doz.; 7 in., 1/7 doz. 1½ x 1 in., with wires 6 in.,  
1/4 doz. For tying on, 1/6 and 1/3 doz. Waterproof  
ink, 9d. and 7d. bot. Crow Quills, 2d. Postage extra.

Highly commended by the R.H.S. at Wisley.  
ORKINGTON . NEW HALL . MAIDENHEAD

# Auto-Shreds' did it

I just burnt them on the  
ground and they thoroughly  
fumigated my plants. The  
judge wanted the name of  
the stuff that kept my  
flowers so insect-free. I  
told him "Darlington's  
AUTO-SHREDS." At all  
seedsmen they cost  
No. 1. (To fumigate 10,000  
cubic feet.) For tender  
or ordinary plants, 6/-  
No. 2. (10,000 c.f.) Ordinary  
plants 4/6  
No. 3. (1,000 c.f.) Ordinary  
or tender plants 1/-  
No. 4. (2,500 c.f.) do. 1/6  
**W. DARLINGTON & SONS, LTD.,**  
HACKNEY, LONDON, E.8.

Please mention THE GARDEN when writing.



Please mention THE GARDEN when writing.

# REAMSBOTTOM'S Gold Medal St. Brigid ANEMONES

(None Genuine without our Gold Medal Seal.) 12, 3/-; 25, 5/6; 50, 9/6; 100, 18/-

Plant now for bloom from late Summer onwards throughout Autumn and Winter.

Miss Campbell, Harewood, Seaton, Feb. 21st, 1925 writes:—"The St. Brigid Anemones I had from you (MAY, 1924) were VERY beautiful and are in bloom now."

Please write for Current Price List of Choicest Flowers for planting now.

PLEASE MENTION "THE GARDEN" WHEN WRITING.

REAMSBOTTOM & CO., TOWER NURSERIES,  
WEST DRAYTON, MIDDLESEX.

A Word to  
Present and Future  
Users of the

**ATCO**  
MOTOR MOWER



There are now over 9,500 ATCO  
Motor Mowers in use—and we are  
constantly extending our Service  
Organisation to keep pace with the  
ever-increasing numbers. To-day  
we are maintaining:—

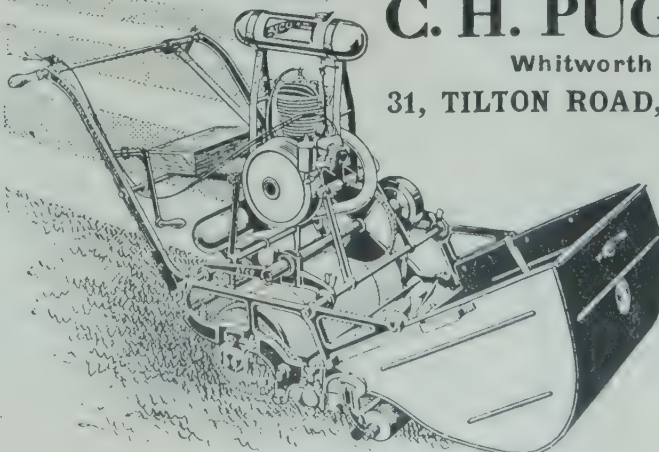
10 permanent Depots completely  
equipped and permanently staffed—  
a chain extending over the country—  
London; Birmingham; Cambridge;  
Darlington; Newport (Mon.); Exeter;  
Ormskirk, (Lancs.); Reading; Glasgow  
and Sheffield.  
32 Sub-Depots  
55 Representatives  
32 Mechanic-Representatives.

These are ready to assist any of the 9,500  
ATCO owners to get the best out of their  
machines—and any of the Depots can  
arrange a free demonstration with the  
ATCO Motor Mower on your own grass.

If you are interested in efficient turf  
culture send for our free publications on  
the sub ect.

**C. H. PUGH, LTD.**

Whitworth Works,  
31, TILTON ROAD, BIRMINGHAM



Large numbers of  
ATCO Motor  
Mowers have  
been supplied to  
Royalty, the  
Nobility, Coun-  
try Gentry, Clubs  
and Corporations



# SHANKS'S



BY APPOINTMENT  
WORLD-RENOWNED

# LAWN MOWERS

**MOTOR MOWERS**

"Make the Lawns like Velvet"

**HORSE & PONY MOWERS**

**HAND MOWERS & ROLLERS**

## MOTOR LAWN MOWER TRIALS

Shanks's Motor Mowers secured the Highest Awards at the Royal Horticultural Society's Motor Mower Trials in Regent's Park, May 13th, 1925.

**A. SHANKS & SON, Ltd.**

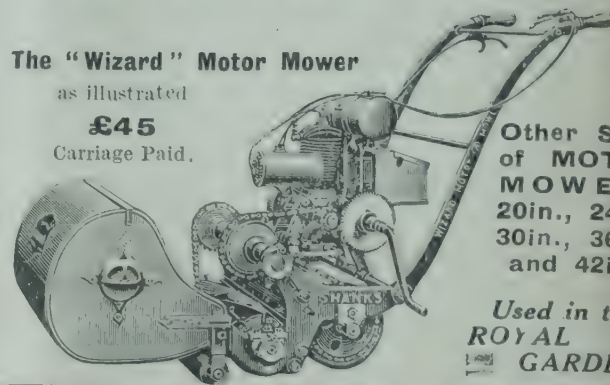
**ARBROATH, SCOTLAND.**  
Bush Lane House, Cannon St., London, E.C.

The "Wizard" Motor Mower

as illustrated

**£45**

Carriage Paid.



Other Sizes  
of MOTOR  
MOWER  
20in., 24in.  
30in., 36in.  
and 42in.

Used in the  
ROYAL  
GARDENS

Please mention THE GARDEN when writing.

**MARTIN HOPKINSON & CO. LTD.**

READY NEXT WEEK

## THE LORETTE SYSTEM OF PRUNING

By LOUIS LORETTE (Professor of  
Arboriculture)

Translated from the French by W. R.  
DYKES, M.A., L-ès-L, Secretary of  
Royal Horticultural Society.

Fully illustrated with 41 full page illustrations  
and many smaller blocks.

Demy 8vo., Cloth, 7/6 net (postage 6d.)

JUST PUBLISHED

## IN PRAISE OF BIRDS

BIRD LIFE DESCRIBED  
AND PHOTOGRAPHED.

By Rev. CHARLES E. RAVEN, D.D.  
CANON OF LIVERPOOL AND CHAPLAIN  
TO THE KING.

Illustrated by 141 Reproductions of Photographs.  
Foolscap 4to. Bound in Art Linen.  
14/- net.

CATALOGUE & LISTS GIVING FULL  
PARTICULARS, ON APPLICATION.

**14, HENRIETTA STREET, LONDON, W.C.2**

Please mention THE GARDEN when writing.

## SALE BY AUCTION OF BOOKS ON BOTANY & HORTICULTURE

**Messrs. SOTHEY & CO.**  
(Estd. 1744)

**34-35, New Bond St., London, W.1**

**WILL SELL BY AUCTION**

**On Wednesday, JUNE 24th**

**Commencing at ONE O'CLOCK precisely**

The well-known and extensive Collection of  
Works relating to Botany and Horticulture  
formed by the late C. HARMAN PAYNE,  
Esq., sold by Order of Messrs. Frank Payne  
and Co., 37, Great Tower Street, E.C.3

On view at least four days prior. Catalogues may  
be had.

*Kill those  
Garden Pests*

WITH  
↓  
**"KATAKILLA"**

POWDER INSECTICIDE WASH  
NON-POISONOUS

READY FOR MIXING WITH WATER

2/- CARTONS TO MAKE 10 GALLS WASH  
6/- " " " 50 " "

STOCKED EVERYWHERE

**MCDUGALL & ROBERTSON LTD**  
BERKHAMSTED, HERTS.

**KATAKILLA SOLUTION**

**KATAKILLA POWDER**

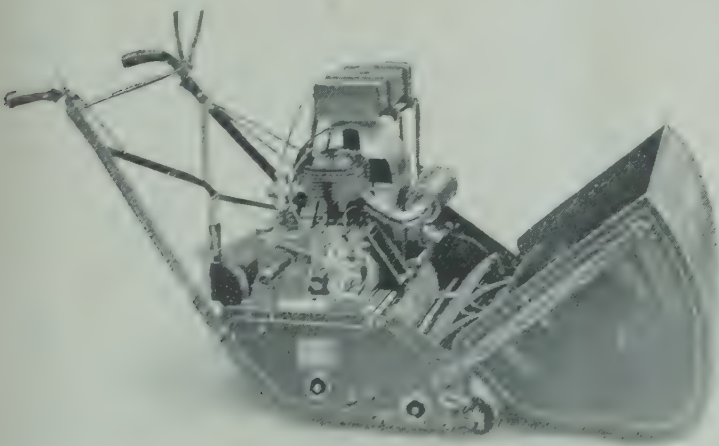
**CERTAIN DEATH  
TO  
GREEN-FLY  
CATERpillars  
AND ALL OTHER  
INSECT PESTS**



fair test of cutting private lawns, as it was in most cases impossible, owing to the irregularity of the ground, to set the rollers and knives to cut the grass really close. It would be advisable, also, for tests to be made with regard to heating, fuel consumption and the work of the machines on gradients. Among the smaller machines, the "Automo Super Lawn Mower" deserves attention. It is made in Nottingham, and a point of special importance for garden owners who intend to do their own mowing is that no spanners are required for the ordinary running adjustments. The rollers and also the knives are easily and quickly adjusted by turning a large hand wheel, and this system has been adopted under licence from the makers of the J.P. Lawn Mowers. The running cost is low, and the makers claim that the average cost of petrol and oil for 2,000 square yds. is only the small sum of threepence. With one of these machines it should be an easy matter to mow a tennis lawn regularly in one's spare time, and the cost of the labour and time saved would go a long way towards paying for the cost of the machine in the first season.

The water-cooled Governor machines made by John Shaw and Sons, Wolverhampton, should certainly be equal to many years of hard work, and every possible contingency likely to be encountered while cutting grass seems to have been anticipated.

It was, I believe, in 1832, that Ransomes of Ipswich made their first lawn mower, and ever since then the firm of Ransomes, Sims and Jefferies, Limited, have turned out lawn-mowing machines of the highest quality. The 16in. model fitted with a 1½ h.p. engine is a splendid machine for small gardens, while for use in grounds up to 5 acres the 24in. and 30in. models can be recommended.



THE "DENNIS" MOTOR MOWER.

The Auto-Mower Engineering Company, Limited, of Norton St. Philip, appeared to be making light work of the grass which their machines were set to cut at the official trials, and these machines have given great satisfaction to those who have purchased the various models during the last few years.

The M.P. (Mower Pusher) can be attached to any mowing machine in from five to ten minutes, and special

fittings are supplied to fit any of the standard machines. The M.P. is fitted with a seat so that there is no need to even walk behind the machine while it is at work. When the mowing is completed, a standard fitting allows an ordinary garden roller to be coupled up ready for rolling the lawn.

Another very satisfactory machine which can be fitted to any lawn mower, and which will, therefore, save scrapping a satisfactory machine already in use, is the Rendle Motor Mower. It is made in two models, of which that known as "A" is capable of pushing mowing machines up to 28ins. and rollers up to 14cwt. Model B will propel mowing machines up to 36ins. and rollers up to 1½ tons. This is a thoroughly sound little machine, and at a cost of 1d. it will cut, with a 24in. machine, 1,000 sq. yds. in fifteen minutes.

The range of motor mowers made by Alexander Shanks and Son, Limited, ranges from a large 42in. model costing over £300 down to the very popular 16in. Wizard, which is retailed at £45. This last machine is of simple design, strongly constructed, and is driven by a 1½ h.p. engine of the two-stroke type.

Thomas Green and Sons, Limited, have been makers of lawn mowers for nearly a century. Their 16in., 20in. and 24in. motor mowers are fitted with kick starters, thereby eliminating the risk of personal injury from backfire, and this I consider a most important point. The only real limit to the day-work that may be carried out by these machines is the walking power of the actual operator.

Dennis Brothers, Limited, of Guildford, have long been famous for their motor lorries and fire-engines, and it stands to reason that any motor lawn mower made in their works will be of high quality. The machines are driven by a 4 h.p. engine, which is powerful enough to cut the grass on quite steep gradients. The engine will tick over very sweetly, and if a trailer seat is fitted it will easily travel on the level up to five miles an hour. A great point about the Dennis machine is that the driving rollers are fitted with differential gear, so that the machine actually drives round bends.

The Atco machines, made by C. H. Pugh, Limited, of Birmingham, are so well known that it is hardly necessary to refer to them. Mr. Andrews, the firm's very capable sales manager, deserves the success which he has achieved.

The future of the motor lawn-mowing machine is assured, and the demand is bound to increase year by year as the result of the successful reports of satisfied users.

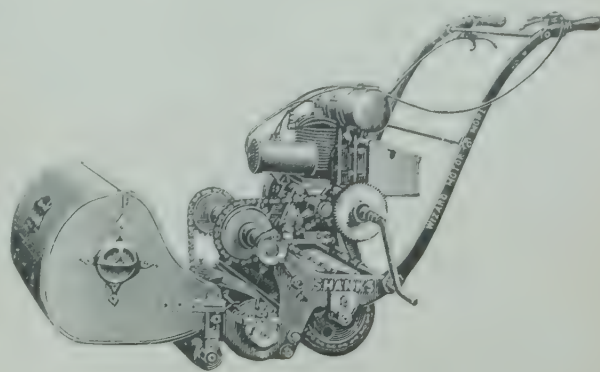
R. W. ASCROFT.

#### REPORT OF TRIAL OF MOTOR LAWN MOWERS AND ACCESSORIES.

On the reports of the judges appointed for this trial the Council of the Royal

Horticultural Society has now made the following awards:

*Awards of Merit.*—42in. motor lawn mower from Messrs. Thomas Green, Limited, for use on sports grounds and similar areas. 30 in. motor from Messrs. Shanks and Son, Limited, for lawns. 30in. motor lawn mower from Messrs. Dennis Brothers, Limited, for lawns. 24in. motor lawn mower "Jehu,"



THE "WIZARD" MACHINE OF MESSRS. SHANKS AND SON.

from Messrs. Alexander Shanks; 24in. motor lawn mower from Messrs. Dennis; 24in. heavy motor lawn mower with trailer seat, from Messrs. Thomas Green; 20in. light motor lawn mower with trailer seat, from Messrs. Thomas Green; and 16in. "Wizard" motor lawn mower from Messrs. Shanks for small lawns.

*Highly Commended.*—30in. Atco motor mower with seat, from Messrs. C. H. Pugh, Limited, for large lawns; 24in. auto-mower with seat, from the Auto-Mower Engineering Company; 18in. Auto-mower with seat from the Auto-Mower Engineering Company; 16in. Atco motor mower, from Messrs. C. H. Pugh, Limited, for small lawns; 16in. Atco motor mower with twelve blades and special sole plate from Messrs. C. H. Pugh, Limited, for very fine lawns; G.N. motor attachment for lawn mowers, from Messrs. G.N., Limited; motor pusher with fore-carriage, from the M.P. Company, Limited, for drawing lawn mowers, etc.; Rendle motor mower attachment, from W. Edgecumbe, Rendle and Co., Limited, for pushing lawn mowers; trailer seat for motor mowers, from Dennis Brothers.

*Commended.*—22in. "Governor" water-cooled motor lawn mower from Messrs. John Shaw and Sons; 22in. "New Godiva" motor mower, from the Godiva Engineering Company, Limited; 22in. Atco motor lawn mower, from Messrs. C. H. Pugh, Limited; 16in. Automo motor lawn mower, from Messrs. F. Mitchell; motor pusher, from M.P. Company, Limited, for pushing lawn mowers.

#### The R.H.S. Amateur Flower Show.—

Owing to the difficulty which amateurs find in deciding in advance whether their flowers will be at their best at the date of the show, it has been decided to postpone the latest date for the acceptance of entries until Saturday, June 20th.

#### The Knaphill Nursery.—

It is announced that the well known rhododendron nursery belonging to the late Mr. Anthony Waterer at Knaphill, near Woking, will be submitted to auction by Messrs. Buckland and Sons at Woking on July 9th. The wonderful blooms are now almost at their perfection and we understand the nursery will be open for inspection by the public during the coming week or so.



# SIMPLE GARDENING

## FRESH VEGETABLES AND SALADS.

YOUNG vegetables and salads may be obtained late in the summer and during the early part of the autumn if seeds of suitable kinds and varieties are sown now, and, in the case of salads, at intervals till the end of July. I am referring to those salad plants, raised from the latest sowings, that grow to a condition fit for using in a few weeks' time. The sowing of seeds at this time of the year is not a new idea, but there are thousands of amateur cultivators who do not adopt the plan. Ground should not be allowed to remain uncropped at this season. In four out of five gardens there are small quarters where quickly maturing crops may be grown. Furthermore, the lifting of early potatoes and the clearing away of early rows of peas, broad beans and spring cabbages, leaves ground vacant. The stump-rooted varieties of carrots are valuable for sowing now. The seeds germinate quickly, so, also, do beet seeds, and very nice roots of both kinds will be available by the end of October. The resultant seedlings should be thinned out at an early stage to allow those plants left to thrive. The earliest cauliflowers should be selected, the seeds sown in the drills thinly and the young plants duly thinned out; it will not answer if transplanting is done. Turnips are splendid, and sowings of these and lettuce may be made monthly till the end of August. Early sorts of dwarf or French beans often prove the tenderest from sowings at this time, but peas sometimes mildew badly. It is very interesting and remunerative work, and keeps the garden full of good things.

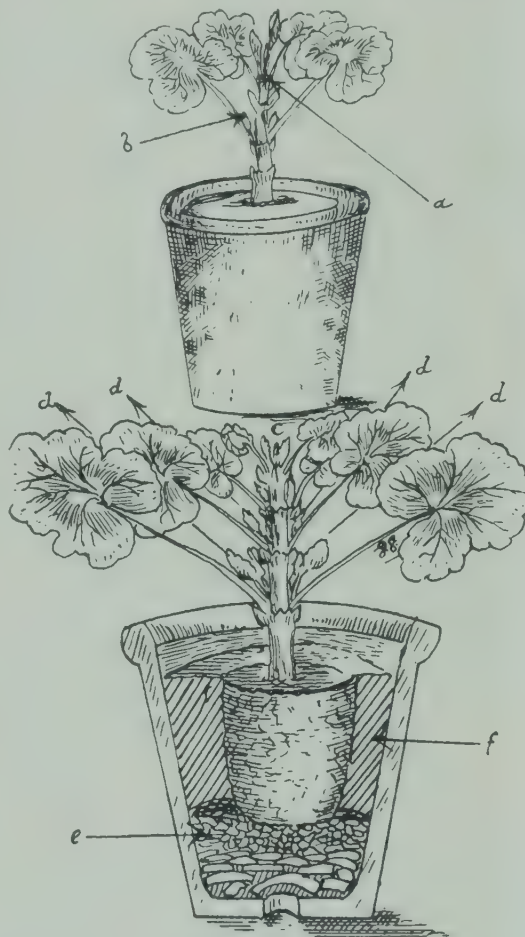
## FINAL POTTING OF CHRYSANTHEMUMS.

Before the end of June all plants grown in pots should be placed in their flowering pots and in their summer quarters, where they should remain till, approximately, the last week in September. I find that many inexperienced cultivators think it quite necessary to mix a compost of many parts to ensure success. The main ingredient should be good fibrous loam in which the grass has died—it should form nearly two-thirds; leaf-soil and coarse sand, one-third. To a bushel of the above combined parts add a 5in. potful of bonemeal and wood ashes, respectively, and a 6in. potful of old lime rubble broken up finely. The whole should be thoroughly mixed. Pots varying in size from 7½ins. to 11ins. may be used, the first for single spring-rooted plants of the weaker-growing sorts, and the 8in., 9in., 10in. and 11in. pots for the stronger, winter-rooted specimens. But it is rarely advisable to place one plant in the 11in. size; two plants will not be too many unless very large specimen plants, bearing many blooms, are required. The cultivator should see that the plants are watered a few hours before they are potted. In all except the two largest-sized pots one big crock will be sufficient

if covered with rather lumpy fibrous loam before any general compost is put in. The new soil should be made firm with the potting-stick and room left at the top for water. Staking, too, should be carefully done, as young shoots are too valuable to lose now. Very careful watering is essential for three weeks after potting.

## SUMMER TREATMENT OF ZONAL PELARGONIUMS IN POTS.

The zonal pelargonium is a soft-wooded plant that grows luxuriantly in good soil, and its sappiness is increased when the plants are not fully exposed to the light and air. If well baked in the sun from the end of June till the end of August the stems will be short-jointed, the leaf-stalks short, and the leaves thick and almost leathery. Such



specimens are going to prove highly useful throughout the winter months if they are housed in a light structure, well ventilated and subjected to a comparatively dry atmosphere and a temperature approaching summer heat. Opposite conditions to the above-named ones would mean wholesale disappointment to the cultivator. A whole greenhouse, or one stage in it, filled with well grown nicely ripened plants in early autumn will ensure a never-ceasing interest throughout the winter months. These plants are old favourites, and if only on account of the cheery brightness of their flowers, they will continue to be so with amateurs. The position of the plants outside should be a warm one as stated, but careful watering and feeding are essential points. To obtain well balanced plants is another important point; this is done by judicious stopping,

as we shall now see. At *a* the point of the young plant is pinched off; side shoots at once begin to grow at *b*. Either before, or soon after, re-pot; the centre shoot, *c*, again begins to lead; *d, d, d, d*, will also soon be filled with side shoots. Stop these, in turn, in August and always remove flower-buds to end of that month. At *e* good essential pot drainage is shown; and at *f*, the new compost. Bonemeal forms a grand ingredient.

## TRAINING GRAPE VINES.

Where, I wonder, is the amateur cultivator who does not like to listen to the sound of dropping grape berries as he is engaged, in the cool of the evening or early morning, in the work of thinning well set bunches of grapes? To secure such fine bunches we must look to the training of the shoots, so that the strength of the vine is directed to the perfecting of main leaves, those of lateral leaves and the stems of the shoots bearing the bunches. Of course, the vine rods are already a fixture for this year; they are, usually, tied to wires too near to the glass, and then there is not sufficient space for the current year's shoots and leaves to grow in and be, as they should, clear of the glass. Where such a condition obtains now, note should be taken of it, so that a better arrangement can be made next year. The side branches, bearing the bunches, always grow upwards towards the roof glass. It is advisable, but not absolutely necessary, to bring them to the wires, but this can only be done safely a little at a time. The variety Black Alicante is very brittle when young and whole shoots are lost if unduly forced down. Mostly, it is safe to tie finally to the wires directly the berries are set. The plan should be to cover entirely, but evenly, the roof space with thick, leathery main leaves and lateral leaves. Stop the branches two or three joints beyond the bunch of grapes and the side laterals beyond the first leaf, removing altogether all sub-laterals while quite small.

## MULCHING AND TOP-DRESSING.

Mulching and top-dressing, to a certain extent, serve the same purpose. But there is a real difference. The top-dressing materials should be richer than the main body of soil used in potting or planting in bulk. When we pot or plant we are supplying a compost for a few roots to benefit by it and, on account of the fewness of the roots, we must be careful to supply such mixtures as will induce new roots to enter them and remain sound, fibrous, for a long time. When top-dressings are applied they are intended as supplementary to previous composts in bulk and are to keep up, if not increase, the vigour of the plants after their roots have exhausted the nutriment in the first applied compost. Mulching means the application of substances which act temporarily, preserve surface roots, encourage their increase and conserve the moisture of the soil by preventing wholesale evaporation.

GEORGE GARNER.



# THE GARDEN.

## EBBS' SPECIAL LIST

Send for  
Of all the finest varieties of Vegetable and Flower Seeds for Summer and Autumn Sowing. Post free on request. **EBBS & SONS, LTD.**, The King's Seedsman, Stourbridge.

**WATERER'S GOLD MEDAL RHODODENDRONS** and Azaleas, Rare Hardy Shrubs, Alpine and Perennial Plants, Vegetable and Flower Seeds, Outdoor Chrysanthemums, including Plants and Dahlias. Catalogues Free.—**JOHN WATERER, ROYAL CRISP, LIMITED**, Twyford (Berks.), Bagshot (Surrey), London.

**HAKELEY'S PATENTED HOP MANURE.** The original and only substitute for Stable Manure. See advert. on back cover.

**M. DUNCAN TUCKER & SONS, LTD.**, Lawrence Road, South Tottenham, N.15.—Conservatories, Winter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**WELLS' BATHS, GARDEN VASES, SUN-ALS, NESTING BOXES.** Catalogue (No. 4) free.—**WELLS AND CO.**, 60, Buckingham Palace Road, S.W.

**TANNED GARDEN NETTING**, small mesh, 1 yds. by 1 yd., 2/-; 25 yds. by 2 yds., 4/-; 40 yds. by 1 yd., 4/-; 40 yds. by 2 yds., 6/6; 40 yds. by 3 yds., 9/9; carriage paid. Compare our netting with others. Lists now ready.—**GALLOP, Net Manufacturer**, Hastings. Telephone: 352.

**WELLS' CATALOGUE OF CHRYSANTHEMUMS** now ready, and will be sent post free on application.—**WELLS AND CO.**, Mersham, Surrey.

**TENNIS BOUNDARY NETTING**, 50 yds. x 25 yds., 20/-. Iron Standards, 9ft., 3/- each. Tennis Nets from 1/- each. Sports Lists now ready.—**GALLOP, Net Manufacturer**, Hastings.

**PROTECT THE BIRDS.**—Rotless Tanned Netting. Small Mesh. As supplied by us to the Royal Gardens. In two qualities. 50 yds. by 1 yd., 4/-, 6/9; 2 yds., 13/6; 3 yds., 12/-, 20/3; 4 yds., 16/-, 27/-; 25 yds. by 8 yds., 27/-. Any size supplied. Carriage paid; approval. Cheaper qualities, 3/6 50 yds., measured mesh closed.

**WIRE NETTING.**—From 2/10 per 50 yd. roll. Cheapest House in the Kingdom. Write us for prices. Thousands of rolls stocked.

**GARDEN HOSE.**—1/2 in. by 1-ply., 60ft., 16/6. Carriage Paid. All sizes supplied.

**BAMBOO CANES.**—3ft., 7d. per dozen, 4/- per hundred. Deck Chairs, 3/9

**TENNIS BOUNDARY NETTING.**—Lines top and bottom, 25 yds. by 2 yds., 16/3; 3 yds., 18/3; 4 yds., 25/3. Carriage paid; approval. Standards for fixing to, also playing posts, poles and all requisites supplied.

**LAWN MOWERS**, 5 Riveted Blades, high wheels, brass bushings, close cutting, highly finished, unequalled value, 8in., 24/-; 10in., 25/-; 12in., 27/4. Carriage paid.

**SEA NETTING.**—Barked, Extra Strong and durable, only 2 1/2 d. square yard. Standards for fixing to.

**ECLIPSE SPRAYER.**—Simplest and Most efficient for Insecticides, Limewashing, Disinfectants, Creosoting by 31/-. Carriage paid.—**E. B. HAWTHORN, LIMITED**, Dept. Shrewsbury.

**GARDEN NETS.**—Best tanned, small mesh, 1 yds. by 1 yd., 2/-; 25 yds. by 2 yds., 4/-; 25 yds. by 3 yds., 6/-; 40 yds. by 4 yds., 8/-; Carr. Paid. Satisfaction Guaranteed. Tennis Nets from 10/-. Special nets for tennis boundary. Pea netting nets. Lists and samples free.—**G. JARRETT, Net-maker**, Rye.

**LAXTON'S STRAWBERRIES AND FRUIT TREES.**—Our Novelty List for 1925 is now issued, and contains new Apples, Raspberries, Currants, Strawberries, etc. All Garden Lovers should have this. Post Free.—**LAXTON & SONS, Nurseries**, Bedford.

**LOAM.**—Fibrous Yellow Turf Loam. Illustrated Catalogue Free.—**A. B. JOHNSTON**, New Park, Cranleigh, Surrey.

**LOWER PRESS.**—Only the "Fothergill" preserves your blooms in their natural colours. Send 2/3 for sample and directions.—**PHILIP & TACEY, LTD.**, Fulham, London, S.W.6.

**BARR'S SEEDS FOR JUNE SOWING.**—For VEGETABLE AND FLOWER GARDEN, ROCK GARDEN and GREENHOUSE. Finest Selected Strains and Tested Growth. Special Lists Free.—**BARR & SONS**, 11, 12, and 13, King Street, Covent Garden, London, W.C.2.

**IRON AND WIRE FENCING FOR GARDENS.**—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—**BOULTON AND PAUL, LIMITED**, Norwich.

**VANCOUVER ISLAND** and Pacific Coast rare ornamental alpine and lowland plants, bulbs, etc. Only those difficult or impossible to obtain in England are offered. Plants well packed and despatched at the right time of year arrive in good condition. Write for list.—**J. BENNETT**, Lake Hill P.O., Victoria, B.C., Canada.

## CONTENTS.

	PAGE
Frontispiece ..	359
Hardy Cyrtopodiums at Chelsea. (Illustrated) ..	360
The Possibilities of South Coast Gardening ..	361
Mosquito Control in Gardens. (Illustrated) ..	362
The Gardens at Underwood, Bournemouth. (Illustrated) ..	364
The Amateur Show ..	366
Weapons of Garden Warfare ..	366
Correspondence ..	367
Viburnums Carlesii and Bitchiense; A Pronouncing Dictionary; Fragrance in the Garden. ..	368
The Floral Display at York Gala. (Illustrated) ..	369
Simple Gardening. (Illustrated) ..	370
Conservatory and Greenhouse ..	370
Labour-Saving in the Garden ..	370

**CRAZY PAVING.**—Dwarf Walling, Rockery Stone direct from quarries. Cheapest and most artistic on market.—**CLAYTON AND HAMMOND, LIMITED**, 53, Baker Street, W.1.

**SUNDIALS, BIRD BATHS, VASES.**—In Imperishable Reconstructed Stone. Write for catalogue G.2.—**CLAYTON AND HAMMOND, LIMITED**, 53, Baker Street, W.1.

**LOOK! TANNED GARDEN NETS.**—All orders despatched same day. 25 yds. by 1 yd., 2/-; 25 by 2, 4/-; 25 by 3, 6/-. All carriage paid. Any size supplied. Also Tennis Boundary Nets.—**MOORE AND CO.**, Net Works, Rye.

**PULLETS**, pure breeds, laying, 7/6 each, 90/- doz.; Chickens, 1,000, great bargain, month old White or Brown Leghorns, Sussex month old, 2/- each, 24/- doz.; two month, 3/- each, 36/- doz.; three month, 4/- each, 48/- doz.; 500 Crossbreeds, same ages, 18/-, 24/-, 38/- doz., carriage paid live delivery. List free.—**CONTINENTAL FARM**, Stratford, Essex.

**ANTIRRHINUMS**, Rose Queen, Fascination and Scarlet King, 1/- doz., 7/- 100, carriage paid, c.w.o.—**WARREN**, Nurseryman, Gerrards Cross, Bucks.

**TO LOVERS OF ROCK GARDENS.**—Inexpensive plants for Sale. Apply **NELL SHAW**, Hatfield Place, Bath.

**MANURES.**—The most complete little book on the subject is "The Manual of Manures," by H. VENDELMANS. 4/5; by post, 4/9. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**FOR 7/- will send post free 4 doz. Schizostylis coccinea**, 6 *Libertia bicolor*.—**HANBURY**, Inverewe, Poolewe.

**GARDEN NETS.**—Tanned small mesh for Seeds and Strawberry protection; 30 yds. long, 2 yds. wide, 4/-; 30 by 3, 7s.; 30 by 4, 8/-; 30 by 5, 11/-; 30 by 6, 14s.—Odd pieces of Netting for Bush work, 4/- bundle; all carr. paid.—**H. ROBINSON**, Net Works, Rye.

## SUTTONS' SEEDS

for Summer and Autumn sowing.

Flower Seeds  
Vegetable Seeds  
Grass Seeds

Complete descriptive lists post free.

**SUTTON & SONS, THE KING'S SEEDSMEN, READING.**

**DOBBIE'S PLANT CATALOGUE** now ready. Free to all readers. Please mention **THE GARDEN** when writing.—**DOBBIE AND CO., LIMITED**, Edinburgh.

**CHEAP GOVERNMENT WIRE !!!**—Great for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760 yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—**GREEN'S GOVERNMENT STORES**, 69, Albert Street, Lytham.

**HERRING NETS** to protect all kinds of fruit, etc., approximately 100 ft. by 30 ft., 11/6 each, carr. paid. No second profits. Cash with order.—**WM. G. GRIGOR**, Port Gordon Station, Banffshire.

**GARDEN NETTING.**—Best selected, small mesh, tanned 25 by 4 yds., 8/-; or 8 yds., 16/-. Carriage paid. Tennis Nets and Standards. List free.—**STRAWBERRY NETTING CO.**, 5, Suffolk Terrace, Lowestoft.

**FULL OF WISE SAWS AND MODERN** instances our catalogue offers all that is brightest and best for the present day garden. The choice plant at Sixpence a time may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—**FEILDEN AND CROUCH**, 2, Fairseat Nurseries, Wrotham, Kent.

**NEW ZEALAND PLANTS** for Seaside Gardens.—*Pittosporum nigrescens* for hedges, pot grown plants for planting now, 18/- per doz. *Olearia Macrodon*, 1 1/2 ft., 12/- doz., splendid for hedges. *Olearia Haasti*, 1 ft., 12/- per doz. *Brachyglottis repanda*, 2/6 and 3/6 each. *Clematis indivisa*, 2/6 each. *Ozothamnus* 2/6 each. *Muehlenbeckia complexa*, 1/6 each.—**TRESEDER AND CO.**, The Nurseries, Truro.

**SEWAGE DISPOSAL FOR COUNTRY HOUSES.**—No emptying of cesspools; a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—**WILLIAM BEATTIE**, 8, Lower Grosvenor Place, Westminster.

**PRIMULA AND ALPINE SEEDS** from choice (1,500 collection). Rare Seedlings and Rockery Bulbs. Lists free.—**REV. J. F. ANDERSON**, Glenn Hall, Leicester.

**GARDEN NETS**, tanned small mesh for Fruit and Strawberry Protection, 30 yds. long by 2 yds. wide, 4/6; 30 yds. by 3 yds., 7/-; 30 yds. by 4 yds., 9/-; 30 yds. by 5 yds., 11/6; 30 yds. by 6 yds., 14/- All carr. paid.—**COUSSENS & CO.**, Net Works, Rye.

**GARDEN NETS**, tanned, small mesh, for Peas, Seeds, and Strawberry protection. 30 yds. long, 2 yds. wide, 4/6; 30 yds. by 3 yds., 7/-; 30 yds. by 4 yds., 9/-; 30 yds. by 5 yds., 11/6; 30 yds. by 6 yds., 14/- Carr. paid.—**ALFRED ROBINSON**, Garden Net Works, Rye.

**JAMES BACKHOUSE, F.L.S., F.R.H.S.**, for many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to **CAER FEGLA**, Arthog, North Wales.

**WATER LILIES.** — **WATER LILIES.** Write for Catalogue. Eighty different varieties listed, in a wonderful range of colours. Other Aquatics and Bog Plants a speciality. Advice given free.—**G. REUTHE**, Keston Nurseries, Kent.

**GREENHOUSE PAINTING AND GLAZING.**—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7lb. tins, 4/-, post free; 14lb. tins, 5/6 each, carriage extra, tins free.—Full particulars from **W. CARSON AND SONS**, Grove Works, Battersea, S.W.11.



# Abol Aids to a Perfect Garden

Abol Specialities are used and recommended by experts. They are always reliable, economical and safe, and are now recognised as standard horticultural requisites.

## Abol Non-poisonous Insecticide

A sure-kill for Green Fly, American Blight and other insects. Without equal as a remedy for mildew on Roses, etc. Used in the Royal Gardens.  $\frac{1}{2}$  pt. 1/4; pt. 2/2; qt. 3/4;  $\frac{1}{2}$  gall. 5/3; gall. 9/6.

## Abol Patent Syringes

Give a perfect spray which may be varied from fine to medium or coarse, as desired. Specially recommended by the National Rose Society. Last a lifetime.

No. 4 (1 x 14), 16/4; No. 5 (1 x 20), 21/-; No. 6 ( $1\frac{1}{2}$  x 20), 26/- Bend extra, 1/6

## Abol White Fly Compound

A safe remedy for White Fly on Tomatoes and Cucumbers. Economical and easy to apply. Simply pour down centre path of the house at  $2\frac{1}{2}$  fluid ozs. to 1,000 cubic feet. From  $\frac{1}{2}$  pt. 1/- to gall. 15/- Postage extra.

## Abol Special Manures

For Roses, Sweet Peas, Chrysanthemums, Tomatoes, Potatoes, and Hop Manure; also Abol Horticultural all-round Fertilizer.

## Abol Weed Killer (Poison)

An extremely reliable and economical preparation, which entirely eradicates weeds from garden paths and walks, carriage drives, etc. In liquid and powder forms, both equally effective. Liquid:  $\frac{1}{2}$  gall. 4/-; gall. 7/6; 2 galls. 14/6. Powder: to make 12 galls. 2/-; 25 galls. 3/6; 50 galls. 6/-; 100 galls. 11/6.



Write for descriptive folder and "Guide to Garden Pests," gratis and post free.

Sold by Nurserymen, Seedsmen, Florists, Chemists, Ironmongers and Stores.

Sole proprs. and mfrs.

Abol Limited, 9, Beltring, Paddock Wood, Kent.

## Notes from Maidstone.

### CAMPANULAS.

The Dwarf Campanulas are a most useful and satisfactory group of rock plants. The season opens with Alyssum, Aubrietias, Saxifrage and Rock Roses, and when their splendour begins to wane, the Campanulas are just coming into bloom. We can recommend the following:—

Garganica, its varieties hirsuta with silvery foliage and W. H. Paine, kewensis, muralis, pulla, pulloides, pusilla, rhomboidea, Stansfieldii, carpatica Riverslea and White Star. We can offer the above collection, all pot grown plants, for 12/6, packing free and carriage paid. We can also offer the somewhat rare Campanula nitida, 3/6 each.

George Bunyard & Co., Ltd.

The Royal Nurseries,

Established 1796. Maidstone.



THE OLD WAY—

- (1) WASTE
- (2) ANNOYANCE TO NEIGHBOURS

# IT PAYS TO ADCOTISE



THE NEW WAY—

- (1) EXPENSES REDUCED
- (2) PRODUCTIVE GARDENS

Week by week you collect a quantity of grass cuttings, leaves, weeds and other vegetable refuse from your garden. Don't leave it in some corner, and later burn it. Treat it with ADCO at once while its full value is retained. In a few months you will have an abundant supply of **SYNTHETIC FARMYARD MANURE** possessing all the valuable properties of first class dung.

If at least half of the rubbish consists of soft green materials such as lawn mowings, cabbage leaves or green weeds, **ADCO ACCELERATOR** should be used, but when dead leaves, vegetable stalks, herbaceous border cuttings, or straw, form the bulk of the heap, **STANDARD ADCO** must be employed.

1 cwt. of ADCO makes from 2-3 Tons of Manure according to the class of rubbish treated.

If your dealer does not stock ADCO write to us mentioning his name.

<b>ADCO ACCELERATOR</b>	- 28 lbs. 4/6	56 lbs. 8/-	1 cwt. 15/-
<b>STANDARD ADCO</b>	- 28 lbs. 6/-	56 lbs. 11/6	1 cwt. 20/-

Carriage Paid to nearest Goods Station.

Cash with order.

**ADCO, LTD.** 40, Harpenden, Herts.







VOL. LXXXIX.—No. 2797.

JUNE 27, 1925

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
*Editorial Offices:* 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. *Offices for Advertisements:* 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
 Entered as Second-class Matter at the New York, N.Y., Post Office.



IT IS AT THIS PERIOD OF THE YEAR WHEN THE BLENDING AND TONES OF COLOURS AND COLOUR SCHEMES ARE SEEN TO BEST ADVANTAGE THAT NOTES OF IMPROVEMENTS TO BE CARRIED OUT IN THE LATER MONTHS SHOULD BE MADE. HERE WE HAVE A DOUBLE BORDER IN WHICH PINKS, BLUES, MAUVES AND WHITES MINGLE TOGETHER WITHOUT A TRACE OF HARSHNESS, AND PRODUCE AN EFFECT WHICH IS WHOLLY PLEASING TO THE EYE.



# HARDY CYPRIPEDIUMS at CHELSEA

BY GURNEY WILSON.

THE beautiful group of hardy cypridiums exhibited at the Chelsea Show by Mr. Albert C. Burrage of Beverly Farm, Mass., U.S.A., was not only an entirely unexpected event, but it formed one of the outstanding features of the whole Show, and the award of a silver-gilt Lindley medal was suitably given in recognition of its scientific and educational value. Considering the remarkably fine specimens that were

contained in this exhibit, the actual collecting of them must have been a matter of much explorative work. This was followed by establishing the plants in shallow boxes, sufficiently strong for exportation to England, and filled with native soil. On arrival in England, Mr. E. M. Preston of The Warren, Hayes, Kent, very kindly gave every facility for the plants to be brought into flower in his garden, while the practical duties were ably carried out by his gardener, Mr. C. F. Wood. As these boxes of dormant plants arrived in a solid and frozen state, great anxiety was felt by the various people responsible for this group that the different species might not all be in flower for the opening day of the Show. Thanks to elaborate directions prepared in America, to the transmission of English weather reports, to cable messages as to the plants' progress in Kent, and largely to careful attention to cultural details, everything came out successfully.

This imposing group occupied about 400 sq. ft. The pine trees formed a background, and under their shade were arranged the many plants of *Cypripedium acaule*, thus following the natural conditions under which this species exists in its native habitat. The history of this plant goes back to the year 1789, the date of Aiton's "Hortus Kewensis." It is commonly known as the pink moccasin flower. The front of the labellum is folded in from the sides, and the two margins meet except for a narrow slit, and they fold in such a way that the sides slope all round and down to the narrow opening. The two basal openings are several times larger than the slit in front, which, however, opens inwards with a very slight pressure, so that a small insect alighting on the pouch would readily find ingress, but could not return, and must leave by way of the basal openings after first passing the stigma, and then rubbing against the sticky pollen which would be carried to the next flower visited. A rare albino variety occurs and differs from the type in having light green sepals and petals and a pure white labellum or pouch. *C. acaule* is the easiest of all the American cypridiums to force, and takes but four or five weeks to reach the flowering stage.

The central zone of this exhibit was composed of many superb specimens of *Cypripedium parviflorum* and *C. pubescens*. These plants closely resemble one another, and as the former was described in the year 1791 and the latter in 1804, *C. pubescens* is sometimes referred to as a variety of *C. parviflorum*. The larger flowers are all borne by *C. pubescens*, whose sepals and petals are often lighter in colour. But in Mr. Burrage's plants several masses had both kinds intermixed, and this supported the previously recorded opinion that not only are they one and the same species, but that one variety might pass into the other when influenced by different climatic conditions. Rolfe referred both these plants to the earlier name of *C. hirsutum* applied by Miller in 1768, and as the entire plant is clothed with hairs, the name is certainly appropriate. But as no type of Miller's species is extant, and great uncertainty exists, Professor Oakes Ames considers it



CYPRIPEDIUM PUBESCENS WHICH BEARS A STRONG RESEMBLANCE TO *C. PARVIFLORUM*.



ONE OF THE "DIFFICULT" NORTH AMERICAN SPECIES TO FORCE, CYPRIPEDIUM REGINÆ OR SPECTABILE.



unwise to adopt this earlier name. The flowers of *C. parviflorum* are sweetly scented, and on this account it is generally known as the fragrant yellow moccasin flower. The experience of American cultivators is that the flowers of *C. parviflorum* open slowly, but last a long time when matured, longer than those of *C. pubescens*. Both bear a strong resemblance to those of the English *C. Calceolus*, but Rolfe has stated that in the American plant the staminode is trulliform-ovate and flat, while in *C. Calceolus* it is oblong, concave or duplicate.

The foreground of this remarkable exhibit comprised many superb masses of *Cypripedium reginæ*, perhaps better known to many under the name *C. spectabile*. Although both names are appropriate, the former meaning queenly appearance and the latter showy, *C. reginæ* must be adopted, as it dates from 1788, when the plant was described by Walter in "Flora Caroliniana," thus three years earlier than the publishing of *C. spectabile* by Salisbury, which occurred in 1791. In the opinion of several authorities, the plants shown by Mr. Burrage were the finest that had ever been exhibited, the central specimen having as many as fifty vigorous growths. This is one of the difficult plants to force, for if the temperature is maintained at over 55° the growths fail to produce flowers. Under the more natural conditions of a lower temperature the growths yield from one to four showy flowers,



CYPRIPEDIUM ACAULE, THE PINK MOCCASIN FLOWER.

whitish tinged with pink, the shoe-shaped labellum of a much deeper pink-purple colour. Although chiefly recognised as a North American species, it has been discovered on the borders of China and Tibet. *C. reginæ album*, in which the colour has vanished from the labellum, leaving it snow-white, flowered at Kew in 1897, but a much earlier record is the plant figured by Sweet ("British Flower Garden," III, t. 240) under the name *C. spectabile album*, thus reviving the old specific name of *C. album* applied to this plant by Aiton in 1789 ("Hortus Kewensis"), or just a year after its original name of *C. reginæ*.

*Cypripedium arietinum* was also well represented by numerous plants prettily arranged between those of the much larger *C. reginæ*. The specific name *arietinum* refers to the conical labellum resembling a ram's head, and these flowers, borne singly on

the apex of a slender growth some 6 ins. to 9 in. high, possess distinctive features that more than compensate for their comparatively small dimensions. The sight of over a hundred flowers of this species effectively arranged among other members of the genus will long be remembered, while the little stream of water, bordered by *Osmunda regalis*, gave a most finishing and natural border line. At each end were five specimens of *Tsuga canadensis*, also from the United States, while a few rocks and an abundance of moss completed the exhibit.

## The POSSIBILITIES of SOUTH COAST GARDENING

RESIDENTS in Scotland, the north of England and the north midlands have the impression that practically all kinds of plants may be grown on the south coast without being damaged by severe frosts in winter and late spring frosts. There are exceptions, of course, as some northern residents realise, and frosts more severe than the average do come in the south. I remember two long, hard frosts during the forty years I have lived in Hampshire, and much damage was done to plants not protected or covered with snow. But, generally, I can say from experience, the possibilities of gardening in and around Bournemouth and the south coast are very great, and enthusiasts know this and take a lead in matters horticultural. Many gardening societies have been in existence for a long time and new ones are formed every year.

Rare trees and shrubs receive much attention and thrive remarkably well. Herbaceous, rock and alpine plants are extensively grown and with great success, not only by experts, but amateurs, too. With the exception of certain districts, fruit is satisfactorily grown. In many parts it is of the highest quality. Pears fruit well on walls, but only moderately on orchard or open border trees. Plums, in the districts extending from beyond Poole Harbour to Southampton, are not a success unless lime is added to the soil. The latter varies in composition considerably. Sand, gravel, light, medium and heavy loams are met with in quite small areas, and then, suddenly, one steps upon peat or clayey ground which produces wonderfully fine crops of wheat—and roses.

The latter remind me of Mr. Walter Child Clark's roses at Micheldever House, Bournemouth. This gentleman has made a rose paradise among the pines of his garden. Scarcely a cartload of the original soil was suitable for roses, but good loam was used to replace the peat and gravel removed to form beds, and with wonderful results. I think the best time to see these flowers is in the evening when the sun is setting.

The flowers are seen in masses in beds and even trailing over bushes and round the gaunt trunks of the pines—a charming picture, indeed, the subdued light enabling the eyes to see the delicacy of the colour of the petals to the full.

On the other side of Bournemouth, nearer Poole, Mr. J. J. Norton has established an almost perfect collection of rhododendrons, which his able gardener, Mr. C. Nippard, maintains in fine health. At Branksome Dene Mrs. Cassel has a large garden and a most interesting woodland. Herbaceous borders have, at a suitable distance, a background of trees and shrubs. Grass here is used in place of gravel paths, and forms a fitting setting to the azaleas and other numerous spring-flowering trees and shrubs and the bulbs. This garden is situated on the cliffs, and is exposed to the full force of the south-west gales, but there is ample protection afforded by the many acres of pines and other trees. Of course, protection of choice subjects is one of the things first considered when a garden is formed in these parts. *Pinus insignis*, evergreen oaks, *Cupressus macrocarpa* are, probably, the most generally planted as wind screens, according to the size of the garden and its grounds.

The Bournemouth Public Gardens contain many rare trees and shrubs and also border plants. Every year there is a judicious change in the bedding-out arrangements, and these afford visitors every opportunity to study and copy them if so minded.

Pines and other kinds of trees are left in natural formation where possible, so that Nature is seen everywhere, even in the private gardens around dwelling-houses, thus avoiding formality, and intermingling, as it were, the work of man with that of Nature. What I may term sub-tropical plants may be used with great effect in the flower garden during the summer months, and made to resemble the groups generally seen in our greenhouses and conservatories. The natural surroundings in existing gardens, and also in districts where new gardens are to be, or may be, formed, enhance the beauty of such beds.



Rock and alpine gardens, grottos, pergolas and those delightful, restful woodland paths where one can enjoy the early spring flowers and the baby buds on the branches of tree and shrub within hearing of cuckoo, woodpigeon and nightingale are all attainable, and do not entail much seeking.

The Swanage stone is near and known throughout the country as ideal for rock and alpine plants. In the writer's own garden the stones prove their adaptability, the roots of the plants soon cling to them and appear to be quite at home. Suitable timber for pergolas is still more easily obtained and is not expensive.

At Exbury House, the charming seat of Mr. Lionel de Rothschild, large woods have been cleared of undergrowth, the soil—clay, peat, loam and gravel mixed, in places—dug up, and thousands of rhododendrons and azaleas with other choice shrubs planted. Lakes, rockeries and waterfalls have been planned and ably carried out in a very natural manner. Near by is the equally attractive grounds of Mr. Ingram Whittaker at Pylewell Park. In a portion of the water garden ferns flourish in positions submerged by tidal waters at times. Rhododendrons and choice ornamental-leaved and flowering shrubs from distant countries find a home. A little to the north, overlooking Southampton Water, grows probably one of the finest specimens of the deciduous cypress, *Taxodium distichum*, in the country. It towers to a height of more than

rooft., has a trunk girth at 4ft. from the ground of nearly 15ft. Magnolias and camellias in the same garden have attained to great size, and the blue hydrangea also. These gardens and the extensive woods contain fine specimens of evergreen and deciduous trees, and belong to Mr. Maldwin Drummond, Cadland Park. I have seen the whole end of one dwelling-house in this district entirely covered with *Solanum jasminoides* within rooff. of the cliff edge. At Hinton, Admiral Sir George Meyrick's charming old country house near Christchurch, conifers do well, also the gunnera and *Fatsia japonica*, respectively, grow to a large size, the last named being about 20ft. high and as far through. At the Hinton Vicarage, the vicar, the Rev. C. O. S. Hatton, raised, among other plants, *Eucalyptus globulus* from seed. One tree is now 50ft. high and has not been many years in attaining this size. In the gardens of Ossemsley Manor Lady Gatty has what I may term a meadow filled with irises—gems, indeed, where many others are set, too.

I have referred to a few large gardens mainly, but similar conditions obtain in small and medium-sized ones almost without number. Torquay and Devon way may be similarly referred to. Still choicer subjects flourish and the growth is a little earlier than on the mid south coast, but I think I have said enough to convince readers of *THE GARDEN* that the possibilities of gardening on the south coast are great and without finale.

GEORGE GARNER.

## MOSQUITO CONTROL IN GARDENS

BY G. FOX WILSON.

WITH the keenly anticipated advent of summer, town and country dwellers are hoping that the climatic conditions of last year will be reversed and that we shall be able to take full advantage of our gardens and the open air.

The winter and early spring months have been allotted more than their average rainfall, so that we may expect a plague of mosquitoes with the coming of warmer days. If, however, we experience a dry summer, there is still a chance that a plague of mosquitoes will appear. Certain species, such as *Anopheles maculipennis* and *Culex pipiens* (the so-called gnat), are not affected to any degree by drought, for the former breeds along the sides of ponds and lakes and the latter, a domestic species, will breed in most of the artificial water supplies used by man.

No true garden lover allows his plants to become infested with insect pests without using his utmost energy to combat them, but the same people take no remedial measures to ensure against countless numbers of mosquitoes, which too often make the garden a place of torment during summer evenings.

In Britain there are about twenty-one species of mosquitoes, including the two well known genera, *Anopheles* (the so-called mosquito) and *Culex* (the common gnat). The blood-sucking propensity is confined to the female mosquito, which lays, in the case of *Anopheles*, from forty to one hundred eggs singly on the surface of the water. The eggs of *Culex* species are spindle-shaped and attached in raft-like structures, comprising

as many as four hundred. The eggs give rise to larvæ (the "wigglers" of water butts), which for respiratory purposes either lie parallel to the surface of the water (*Anopheles*), or hang downwards in a Y-shaped position (*Culex*).

When the larvæ are fully grown, they turn into pupæ, which are comma-shaped and breathe at the water surface through trumpet-like "ears," situated just behind the head. After a given time, depending on weather conditions and temperature, a slit appears along the back of the pupa, out of which escapes the adult mosquito.

When large numbers of mosquitoes are found in a house or garden, it is evident that the breeding place is near, the distance ranging from fifty

to two hundred yards, although a mile is not too distant if human habitations are the goal.

There are two methods of control: (i) preventive, that is to prevent egg-laying, and (ii) remedial measures, to destroy eggs, larvæ and pupæ in the water and adults during hibernation and diurnal quiescence.

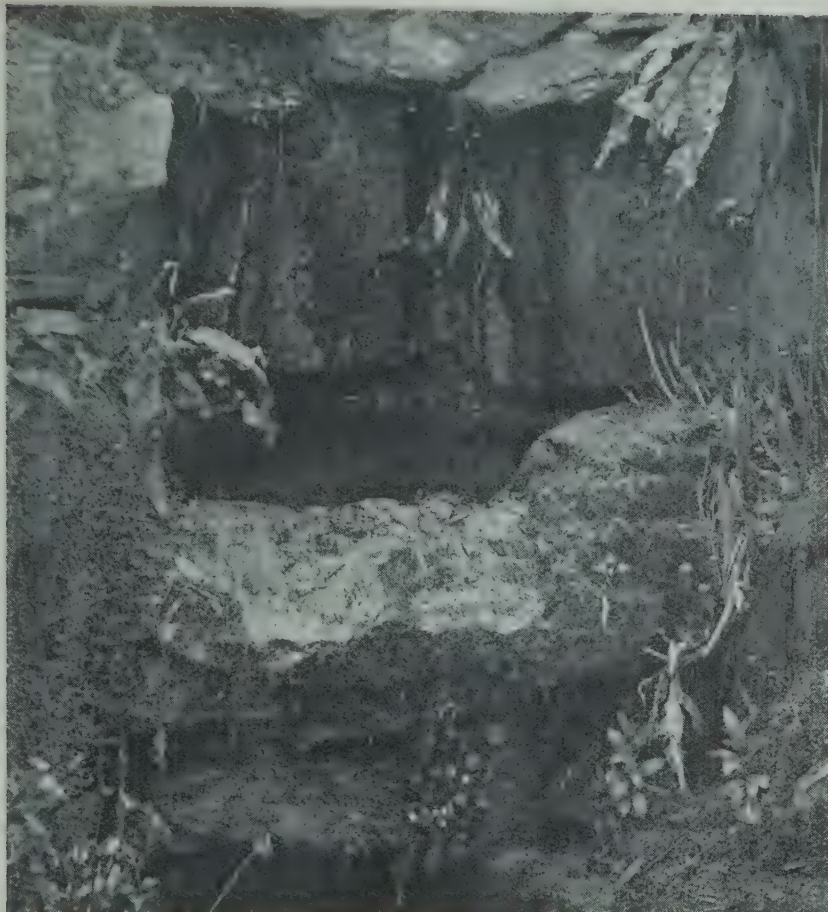
The chief breeding places in gardens are:

1.—Ornamental ponds, including rockery pools and fountains. Such situations are the favourite resorts sought for by *Culex pipiens*, and constant attention should be paid to such stagnant water supplies. All sources of stagnant water should be viewed with suspicion, especially where decomposing organic matter occurs. It is desirable that larvivorous fish, such as minnows or gold fish, be kept wherever practicable, for these



OLD TINS FILLED WITH STAGNANT WATER FORM EXCELLENT BREEDING PLACES.





A TYPICAL ROCKERY POOL.

will devour the egg masses and larvæ, provided that the latter are unable to seek shelter beneath water plants, such as nymphæas, aponogeton and duckweed, and under overgrowing herbage, algæ and debris. All duckweed, algæ and debris should be periodically cleared so that the fish may have full play.

2.—Birds' baths. It is not uncommon to find egg masses and larvæ in water-holding garden furniture. The water should be renewed every week, care being taken that all egg masses and algæ clinging to the sides of the bath are removed.

3.—Liquid manure tanks. *Culex pipiens* is not particular in its choice of water in which to oviposit. Preventive measures include the covering of all such tanks with air-tight lids or muslin-covered frames. When larvæ are found, it is advisable to apply an oil film. This kills them as they come to the surface to breathe. A larvicide may be put into the water to attain the same end.

4.—Old, disused wells. In many old gardens one finds these ideal breeding places, which should be effectually screened to prevent access to the adult mosquito bent on ovipositing.

5.—Water butts and rainwater storage tanks in glasshouses. The former should be screened to exclude mosquitoes altogether, or an oil film may be applied, which will not injure the human cuticle if the water is to be used for washing purposes. Goldfish may be kept in storage tanks in glasshouses and the tanks periodically cleared of algæ and decaying organic matter.

6.—Old, empty tins, watering cans and broken flower pots. In large gardens there is usually an accumulation of rubbish, where old tins and such like are thrown and stagnant water collects. The tins should be buried and the pots broken up for use as crocks.

7.—Gutters of sheds and glasshouses. Inattention to the accumulation of stagnant water in gutters is to be deplored and is due either to broken pipes or stoppage by fallen leaves, making ideal breeding places for mosquitoes. All gutters

should be kept in repair and debris removed so that the rain-water may run away without hindrance.

8.—Holes in tree trunks. Many trees, particularly beeches, have holes in various parts of the trunk, which hold water, and in which mosquitoes, especially *Anopheles plumbeus*, oviposit. These should be filled in with sand or soil or sprayed every ten days with paraffin.

9.—Ditches. A much neglected part of the garden is frequently a ditch, which is allowed to become overgrown with herbage, which, together with broken branches and general rubbish, holds back the water. Great attention should be paid to these situations, for they often provide ideal conditions for excessive breeding. The sides of the ditch should be steep and clear of herbage and the water allowed to run away without impediment. If the current is fast there is little danger, but if sluggish, recourse should be taken to spray every ten days with paraffin oil or apply a larvicide.

The foregoing measures apply to the early stages of mosquitoes, but there are certain precautions to be taken with regard to the adult. In the vicinity of breeding places, large numbers of mosquitoes may be encountered sheltering in coarse herbage. Periodical cutting and burning should be done.

Where the style of wild gardening is preferred, numerous adults may be caught by placing dark lined boxes, open at one end, on trees. These situations are sought for by mosquitoes as shelter during the day. The traps should be examined every morning, the adults destroyed, and the traps reset. Species of *ochlerotatus* are most persistent tormentors in woods and may be captured as advised.

Summerhouses, potting and tool sheds are favourite resorts for mosquitoes to shelter in during the daylight hours and also for hibernating quarters. Where numbers are encountered, it is advisable to spray with an insecticide, such as Formalin soap, or fumigate with cresyl or carbon bisulphide, previously making the building airtight to prevent the escape of the gas.

Many gardens are situated in the vicinity of vast breeding places, such as marshes, lakes, ponds, streams and pools in disused clay pits, but little can be attempted unless the matter is taken up by the local authorities and a community campaign instituted.

The remaining factors are the question of the use of deterrents and antidotes. The former, of which there are several proprietary lotions, are preferable, and the use of such oils as those of citronella or eucalyptus, applied to the wrists, ankles and the back of the neck, will prevent one being bitten. Antidotes, such as iodine and ammonia, should be applied, as soon after the bite has been received as possible, to allay irritation and prevent blood poisoning.



A FAVOURITE RESORT SOUGHT BY MOSQUITOES; A POND CONTAINING ALGÆ AND DUCKWEED.



# The GARDENS at UNDERWOOD, BOURNEMOUTH

THESE GARDENS SERVE AS A STRIKING EXAMPLE OF WHAT MAY BE ACCOMPLISHED WITHIN A LIMITED SPACE, AND GIVE ONE AN EXCELLENT IDEA OF THE MANY DIFFERENT KINDS OF PLANTS FROM ALPINES TO SUB-TROPICAL SPECIES WHICH FLOURISH UNDER THE CLIMATIC CONDITIONS OF THE SOUTH COAST.

**S**ITUATED on the extreme edge of the undulated portion of the cliffs just beyond the boundary of the Borough of Bournemouth, and on the outer boundary of Dorset, is the picturesque sea-side residence of Lady Wavertree. On a recent date, by the kind permission of Lady Wavertree, it was our privilege to inspect and enjoy the beauties of the gardens at "Underwood." Although not of large extent, being, approximately, about two acres, these charming gardens contain all the chief features of an extensive garden, the most striking being the fine series of rockeries. The borders are filled with the choicest subjects: colonies of heaths, rock and alpine plants, herbaceous subjects and roses are grouped all in the most appropriate parts, and, though really distinct, they all merge in a natural way. The paths, leading from one to another, broadening and narrowing as required, cannot be regarded as beginning in a number of places and abruptly ending in others, but seem to be a part of the whole, and are constructed of stone crazy work. Lady Wavertree has been indefatigable in superintending the work of carrying out her own ideas. It is only a few years since the site of these gardens was a crumbling



THE FLOWER BORDERS BACKED BY NATURAL CLIFFS WITH A VISTA OF THE OPEN SEA.



ONE OF THE MANY PATHS BORDERED BY HARDY FLOWERS LEADING TO THE SUMMERHOUSE.

mass of sand, gravel and clay; now they have the appearance of having been established for many years. One can, as in a fairy tale, fancy a big slice of alpine rock being suddenly transported and dropped, bodily, on this southern cliff of old England.

Being so close to the foreshore and partially exposed to full force of the winds from the sea, as the outlook is over Poole Harbour and, more directly south, to the open sea, some protection must be provided, and this is being effected by the planting of an outer belt of *Pinus insignis*, evergreen oaks and black poplars. In this garden our noble dead are remembered. In one prominent corner Lady Wavertree has built a very substantial summerhouse; cut in the stone floor are the following words, "The Great War: 1914-1918. In all the fulness of their youth, They gave their lives that we might live."

It is only from this summerhouse that there is a beginning of the garden paths, and, *vice versa*, all paths seem to lead to it. In one direction there is a long path spanned by a substantial wooden pergola which is well furnished with roses and other climbing plants; on both sides the borders are filled with herbaceous plants, delphiniums being prominent occupants. On the southern side of this pergola there is a formal sunk garden, the pergola and the herbaceous plants making a charming background to it. The design of the beds is a formal one, too; in due season they are filled with old favourites: wallflowers, violas, bulbs and, in the snug corner beds, blue delphiniums. The low walls are being furnished with suitable subjects, the idea being to establish, mainly, masses of aubrietias. Here, too, in close proximity, is a big clump of *Rhododendron Alice*. The next path, to the south of the sunk garden, is bordered by masses of *Azalea mollis*, prominent among a wealth of old-world flowers; again, we look upon a fine group of *Rhododendron Pink Pearl*, with laburnum and roses on trellis as a background.

The next path is bordered by lavender hedges, quite low, the principal occupants of the borders being roses and lilies. In a recess the main collection of roses is grouped, and yet another path is flanked by poppies and lilies, heliotrope and standard



pink roses. Rounding a corner one suddenly comes to low walls, nicely covered with suitable plants, dwarf shrubs at the foot encroaching on the paved way which leads directly under the imposing-looking Italian pergola; at the end of this pergola, forming a cul de sac, we see a most refreshing fern grotto, rapidly becoming clothed with ferns; turning to the right one looks down upon a very imposing bank of rocks forming a sheer drop of nearly 30ft. In this rockery, in keeping with its size, are bold masses of flowers, *Lithospermum prostratum* being prominent owing to its good health and free-flowering propensity.

Following the paved paths which, here, are decidedly winding and undulating, one passes over narrow shelving rocks and arrives at the moraine garden just being formed. A sun-trap, yet cool, summerhouse, designed by Lady Wavertree, is found in a corner, but one may say it is a part of this lower portion of the rock garden itself, as a portion of the cliff has been excavated and faced with stones, the flat roof being covered in with stones, also; draping the ledge directly over the house and hanging gracefully from it are trailing plants, among them, well established, being *mesembryanthemum*. At the lowest level there is a small pond and on its banks and the slopes above masses of yellow *mimulus* and irises are thriving, with a *gunnera* at the extreme edge of the water; the water is retained by a cemented basin and the soil around is porous.

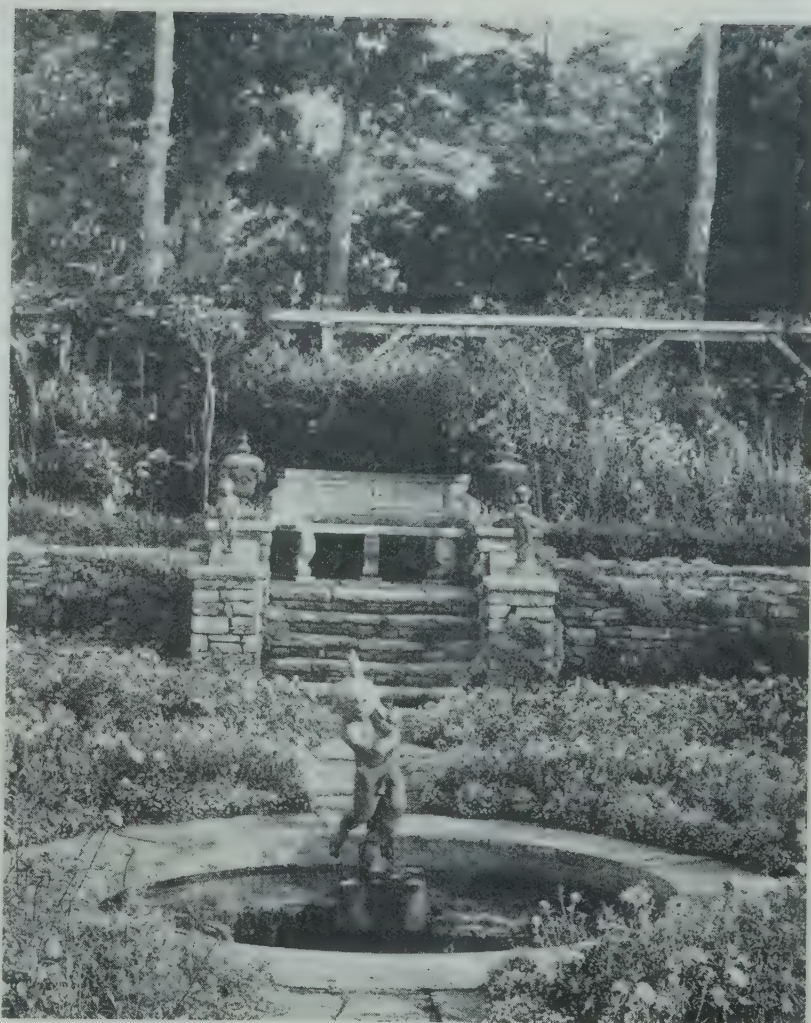
The heath bank is delightful. The bank itself is terraced, being fronted with peat turves; the heaths are already established and look quite at home, and in a short time the whole bank will be covered. Near by is another summerhouse, on the top of a high bank, which is also terraced and planted with violets, while the rock garden *Juniperus compressa* trailing gracefully from the stones forms a part of the retaining walls. Peonies are doing well in various borders and colonies of pinks, *Allwoodii* and Mrs. Sinkins, are luxuriant.

On the lawn immediately in front of the house there are a few formal flower beds filled with summer bedding-out plants, and, on the left-hand, a long herbaceous border margined with *Viola Maggie Mott* and backed by a high trellis covered with climbing roses. On this lawn there is a splendid standard rose of the variety *Excelsa*, the trusses of flowers coming freely and very large. There are many very ancient vases, stone seats and other garden ornaments; mention may be made of a splendid Venetian well-head hundreds of years old, about 3ft. wide and the same in height, the rims grooved by the action of the ropes in those long-past years when water was drawn in the primitive way of those times. It bears the coat of arms of the Lombards, the whole being in a wonderfully good state of preservation.

*Lithospermum Heavenly Blue* does very well and forms a prominent feature among the rocks. Other outstanding plants here were double-flowered dwarf gorse, *anchusas*, *Picea glauca*, *retinospora*, dwarf junipers, *Picea Balsamica Hudsonica*, *Cistus Norbury Gem*, *Campanula garganica* and *Geum Robertsonii*. *Ceanothus dentata* was lovely, growing in bush-form against the walls of the house.

All the main parts of these gardens are watered by an overhead system of perforated pipes, cunningly fixed in the shrubberies and, being painted dark green, are not openly noticeable. Inadequate as these notes are in doing justice to the many charms of this garden by the sea, they would be still more so if they did not include a reference to the spacious and well stocked aviary, and the wild bird sanctuary, which is a rhododendron, shrub and tree-covered corner, truly representing a portion of natural woodland.

It is, briefly, a restful garden, and our thanks are due to Lady Wavertree for so kindly explaining its many attractive features.



THE CENTRE PORTION OF THE FORMAL SUNK GARDEN.  
With a charming background of pines.



THE ROCKERY BELOW THE ITALIAN PERGOLA.  
Planted with bold masses of flowering shrubs.



# THE AMATEUR SHOW

IN THIS ARTICLE MANY USEFUL HINTS ARE GIVEN TO INTENDING EXHIBITORS.

**W**OULD-BE exhibitors of hardy plants at the coming amateur show had some assistance from nature by the wet weather of May, which gave plants a good start. Plants generally were then rather backward, but the warm weather experienced in June, up to the time of writing, has brought things along rapidly, and the majority of subjects may now be considered to be in an average state of development for the time of year.

To those who intend exhibiting in the rose classes, work of primary importance a few days before the show will be that of shading the blooms of varieties of warm shades and tones of colour, such as flame and apricot, many crimsons, too, are apt to lose richness of colour and attain the undesirable purplish tint during hot sunshine. The shading must not, however, be dense or more harm than good will be the result. No part of the plant except the bloom must be shaded.

In the tea and hybrid tea rose classes, unless blooms are very plentiful, it will be necessary to try to hold back those which, if left to themselves, may be too forward by the date of the show. This is done by tying the blooms, to prevent premature opening, with the aid of a soft material, such as budding cotton. The time to do this is immediately the first row of petals have expanded. This must be done in such a way as to allow the bud to expand. The easiest method is to give the first knot a double twist, and no further knotting is necessary. This tying will help to retard the opening of the blooms and keep them clean.

Roses for the Rambler classes should be chosen, if possible, from the double varieties, as they travel and last, when cut, better than singles. Long stalks, with good sprays and clean, healthy foliage should be chosen. These must be gone over and any old blooms removed, also those with discoloured stamens.

## PACKING AND TRAVELLING.

Undoubtedly the best means of taking cut flowers to shows is in water. The small amateur will not, perhaps, be able to do this. It is the method usually adopted by the big exhibitor, whether amateur or trade grower. For this purpose deep boxes or skeleton boxes, with clean canvas sides and top are used. Holed bottoms, into which tins or tubes can be fixed, will be necessary.

For packing dry, flat boxes, such as are used for packing flowers for market, will be ideal. The length and depth of box will be governed by the subjects to be packed. These range from 18 ins. to 6 ft. in length, and 4 ins. to 8 ins. in depth. The depth allows for one layer only.

## CUTTING.

The best time for cutting outdoor blooms of any kind, during hot weather, is at break of day. The blooms will by this time have

had a chance to recover from the effects of the previous day's sun. This early cutting may not, however, be possible and often has to be done the evening before, or even the morning preceding the day of the show. Whenever the cutting is done, receptacles filled with water must be in readiness and the stems placed in immediately. As roses have to be shown in vases, they should be cut with long stems. Avoid cutting into two year old wood as this may cause early fading. One or two hours should be the minimum time for stems to be in water previous to packing in boxes. The blooms will be better kept in a fairly light and airy room free from sun, rather than in a close, dark room.

In choosing show blooms, quality should be observed throughout. It may be taken for granted that freshness, size of bloom, according to variety, colour, healthy foliage, length of spike in certain kinds and uniformity in each vase will be telling points. Sweet peas should have quality and substance, with four flowers well placed on a 12 in. to 15 in. stalk. A good delphinium should have a spike which scarcely varies in size from top to bottom; the individual flowers large, closely placed, yet not crowding each other, and completely hiding the central stem. In gladioli the first blooms at the base of the spike should be fresh with as many expanded blooms as possible. This also applies to antirrhinums, and is preferable to having to remove lower faded blooms. Carnation blooms should be as large as possible for the variety, with an unburst calyx, long wiry stems and perfect foliage.

## PACKING

All flowers should be packed dry, not damped, as is sometimes done. The boxes must be well lined with clean tissue paper. Sticks the exact width of the inside of box, wrapped round with soft paper, must be prepared. These are for the purpose of tightly keeping each layer of blooms in position. It will be necessary to place one in the bottom to support the first layer. In the case of such as roses and carnations, the stick should be placed so that it comes immediately at the base of blooms. When the first layer has been placed in position, the stems are held down tightly by another wrapped stick, and in such a way as to form a bearing for the next layer, and so on, till the box is filled.

Somewhat different arrangements have to be made to support such as delphiniums, antirrhinums and gladioli. For the former, long boxes will be essential, as the stalks must not be shortened. Sticks should be placed in the packing boxes about 3 ins. from the bottom and kept in position by tacking or nailing from the outside. The stems are carefully laid on these and tied in several places, three at least, top, bottom and centre.

The tops of certain flowers, such as delphiniums and antirrhinums, have a habit of curling upwards when packed. The tying

near the top will probably prevent this. Another means of prevention is to arrange, by labelling, etc., for the boxes to travel end up. If several cases are tied together, this can be easily arranged. It seriously detracts from the appearance of an exhibit if the flowers have the tops curled or bent.

## WIRING.

It may be an advantage to do a certain amount of wiring before packing. This would help to straighten out any kink in the stem and prevent others during transit. No mention is made in the schedule about wiring, so that it can be taken as permissible to stage wired blooms. This, however, should only be done if absolutely necessary. A natural arrangement should be aimed at and wired blooms will, no doubt, be noticed by the judges as not being in the best taste.

## ARRANGEMENT.

Immediately on arrival at the R.H.S. Hall, positions should be ascertained, vases procured and filled with water, the flowers unpacked and placed in the vases temporarily, to allow them to recover.

In most cases, before finally arranging, it will be necessary partly to fill the vases with some foliage or stems, such as rushes. This must not show above the mouth of the vase. The object of this is to enable the blooms to be arranged and kept in position.

Twelve sprays of sweet peas will make a nice vase without crowding. A few pieces of good, healthy foliage may be allowed to hang over and partly hide the vase. A few tastefully disposed growths should be arranged with the flowers, but not in such a way as to hide any.

For the delphinium and gladiolus which have to be arranged three in a vase, a triangular arrangement is the only one to show off each spike properly, and more will depend on the quality of flowers than the way they are set up.

## POT PLANTS.

The packing of begonias, gloxinias and orchids will require much care. For these somewhat special attention will be necessary.

For the majority it will suffice to stake securely according to the kind of plant and to insert three or four stakes around the edge of pot long enough to stand well above the plant when tied up. The foliage and flowers are then carefully tied to the stakes and the whole wrapped round with soft paper.

See that the plants are well watered before packing and that all pots are washed clean. Plenty of good packing material should be used and the plants and pots so tightly packed that there will be no danger of their shaking about in transit.

Strong boxes should be used, but not so large and heavy, but what two men can comfortably move them about. Strong handles should also be provided. ARTHUR J. COBB.

# WEAPONS OF GARDEN WARFARE

INSECTICIDES FOR THE SUMMER OFFENSIVE.

**G**ENTLE and peaceful is the art and craft of gardening; nevertheless, it were folly to disguise or to ignore the fact that there is no peace in a garden where there is no warfare against the enemies of plant life.

Season by season the prospect changes, and the enemy of to-day and to-morrow demands other materials and other methods of application than those of yesterday, and the importance of prompt

activity at the dawn of summer is the greater by reason of the rapid movement and incessant industry of the varied pests of the summer months.

There is something rather formidable about a tabulated list of insect and fungoid pests which may invade the garden, the orchard and the greenhouse, and sometimes methinks too much stress upon the numbers and variety of destructive pests the gardener may have to

contend with and too elaborate instructions regarding preparation of chemical and other mixtures tend to convey the impression that gardening is more of an anxiety and weariness of the flesh than an agreeable pastime or beneficent occupation.

No good purpose would be served by attempting to minimise the folly of neglecting to combat the enemies of plants, but it may certainly be urged



that successful warfare is brought well within reach of every garden owner, for both insecticides and fungicides are very plentifully offered by firms who are equipped for faultless manufacture of most reliable fluids and powders which require no more preparation than dilution with water.

Apart from the quite common and easily conquered pests, such as green fly and caterpillars, and the ordinary rusts and mildews, a garden seldom has an extensive range of other foes, so it is by no means always essential to keep an elaborate chemical chest, the wiser plan being to make a point of having a good general purposes insecticide and something sulphurous for common leaf diseases. When some strange and unknown enemy makes its appearance, it is unwise simply to try this or that and await results, for the great need is to suppress both insects and diseases at the earliest opportunity, and the first step should be to learn the identity of the foe, for that will help in deciding what will best cope with it. A particular pest may habitually infest one garden, while it remains practically unknown in another. One season will bring a great plague of an insect, while another is free or has quite a different intruder, but the "Service for Readers" scheme of THE GARDEN affords the opportunity for every reader to ascertain what pest is worrying his plants and what will worry the pest.

There are many insects which pierce the epidermis or skin of a leaf and suck the sap from the cells underneath. A poisonous insecticide which simply coats the surface of the foliage is unlikely to prove effectively destructive of such insects, and resort has to be had to preparations which kill by contact.

There are, of course, many substances which are of a caustic nature which would kill the majority of soft-bodied insects, but in so doing they would also damage and frequently destroy soft foliage and young growing shoots, and cannot on that account be used on plants in full activity. Fortunately, however, cold fluids of an adhesive nature which will spread over the hides of insects, creating a gelatinous film, prove fatal, while, practically speaking, harmless to the plants. In some cases the fluid dries, and ensheaths the insect in a hardened shroud which hampers movement, while in others the greasy or sticky film seals up the pores and respiratory organs of the insect and suffocates it.

Among insecticides of this type saponaceous sprays occupy an important place. The old, well tried Gishurst Compound made by Price's Patent Candle Company, Limited; the equally well known and reliable "Abol" made by Abol, Limited, Paddock Wood, Kent; McDougall's Katakilla, made by Messrs. McDougall and Robertson, Limited, formerly of Manchester, now of Berkhamstead; "Kilzall," of the Stonehouse Works Company, West Bromwich; V2 Fluid, the summer wash of Messrs. W. Cooper and Nephews, Berkhamstead, are a few of the leading proprietary insecticides of the "contact" character which may be used for all the sucking insects, and also for caterpillars.

For the latter, and also for weevils, bugs and a host of biting, gnawing and chewing insects it is of great advantage to use a spray which is either poisonous or acrid, and that is where nicotine and also quassia prove to be extremely serviceable.

The nicotine washes of the horticultural sundriesmen are carefully compounded,

under the direction of skilled chemists with up-to-date laboratories for determining strength, purity and general efficiency. Messrs. Corry and Co., Bedford Chambers, Covent Garden, London; G. H. Richards, Limited, Borough High Street, S.E.; J. D. Campbell, Lund Street, Cornbrook, Manchester; J. Bentley, Limited, Barrow-on-Humber, Hull; Darlington and Son, Limited, Hackney, London; Robinson Brothers, Limited, West Bromwich; Edward Cook and Co., Limited, Bow, London, E., all make a feature of nicotine washes, and although nicotine is an expensive commodity, it is extremely economical in use because highly powerful; while for fumigating greenhouses XL All Vaporizer, McDougall's sheets and cones, Abol Fumigating Shreds, Darlington's Auto-Shreds, Corry's "Lethorion" Fumigators, Bull's Shreds, the Briton Ferry Chemical and Manure Company, Limited's Auto-Shreds and several other proprietary articles of a similar nature are among the greatest boons to gardeners, and the most dreaded terrors of the insect world.

One might extend references to insecticides to great extent, but the Garden Supplies, Limited, Cranmer Street, Liverpool; Messrs. Murphy and Son, Limited, Mortlake; Messrs. T. Vickers and Sons, Limited, Wigan; The Chemical Union, Limited, Ipswich; and the Strawson Chemical Company, Limited, 79, Queen Victoria Street, E.C., are a few firms to whom horticulture is indebted for cleverly prescribed death-dealing weapons of gardening warfare, and even that troublesome and tenacious pest of tomatoes, salvias and many other plants, white fly, can be worried out of existence by careful use of one or other of the advertised white fly antidotes. A. J. MACSELF.

## CORRESPONDENCE

### VIBURNUMS CARLESII AND BITCHIUENSE.

SIR,—As a friend of both your correspondents, may I venture to suggest that the difference of opinion between Sir H. Maxwell and Mr. F. Stern as to the merits of *Viburnum Carlesii* and *V. bitchiuense* (not *bitchuense*) has its origin in the fact that the specimens of the latter at Monreith are obviously not of the best form of a variable plant? Were it otherwise, the flower buds of the plants there would certainly have that engaging rose tint which Mr. Stern—and others—find so attractive, and Sir Herbert Maxwell does not detect.

This *viburnum* grows wild on the mountains of Bitchiu, a province of western Japan, and was named by the Japanese botanist, Makino, in 1902. It is often said to be inferior to *V. Carlesii*, with which at one time it was confused by importers, who sent it here in moderate quantities; and so as a small plant, it usually is. But a comparison of two plants of such different habit is hardly fair. There are specimens of *V. bitchiuense* in this country as much as roft. high, of free branching habit, and when the fragrant, rose-tinted flower buds open in spring among the bronzing leaves, he would be a bold man who would pronounce it an inferior to Carles' species, so persistently miscalled *Carlesii*. It has the great advantage over the latter of rapid growth, and, like

*V. fragrans* and *Osmanthus Delavayi*, has evidently not reached its maximum yet in Britain.

Sir Herbert Maxwell expresses the view that *V. Carlesii* is the choicest of the deciduous species, and his opinion is entitled to every respect. But even doctors differ, and there are good judges who prefer *V. fragrans*—for more reasons than one.—A. GROVE.

### A PRONOUNCING DICTIONARY.

SIR,—In your issue of May 16th, a correspondent, C. F. Gray, writes about the pronunciation of botanical Latin and advocates a small dictionary being compiled. As a matter of fact, in 1909 the *Gardeners' Chronicle* published a little book for rs., called "Pronunciation of Plant Names." It is very simple, and, I believe, correct, except for making "erica" with the "i" long; as it is derived from *ericus*, a hedgehog, it should certainly be short.—C. G. O. BOND.

### FRAGRANCE IN THE GARDEN.

SIR,—The article on "Fragrance in the Garden," by Mr. H. W. Canning-Wright, published in THE GARDEN, February 28th, 1925, is exceedingly interesting, and deserves the attention of all raisers of new varieties of plants. My few observations for some years past on the fragrance of plants clearly show that such plants as roses and sweet peas—that is, most of the new or modern varieties—are greatly wanting in that delicious

perfume for which older varieties were famous. We have in many of our Australian plants, delicious fragrance—quite different from the many odours of European, Asiatic and American plants—such as some species of boronias, acacias, species of epacrids, eucalypts and many others needless to refer to here. My object in writing is to refer to a plant, *Cestrum nocturnum*, which, I think, should grow very well in warm, sheltered places in Great Britain. It bears profusely tube-shaped, long, yellowish green flowers which at nights emit wonderful and delicious fragrance, something like that of the well known night-scented stock, but infinitely better and more profuse. The plant is a dense-growing shrub which attains a height of about roft. or so, and succeeds well in almost any kind of fairly well drained soil. About the suburbs of Sydney it succeeds admirably with little or no care.

I may add that one or two species of xerotes—common about the suburbs of Sydney and which grows about sandstone rocks—the foliage of which resembles somewhat that of *Iris stylosa*, have very peculiar fragrance. In the old days of the colony the colloquial name was "Rum-bottles," for want of a better I suppose.

I have been a subscriber to THE GARDEN for more than fifty years, and have a great regard for the good old publication.—WALTER S. CAMPBELL, Sydney, New South Wales.



# THE FLORAL DISPLAY AT YORK GALA

**I**DEAL weather favoured this interesting northern event. Cloudy skies and a cool, northerly breeze following the recent heat wave must have made the heart of the exhibitor glad. It was also more comfortable from the visitors' standpoint, for the marquees were never overpowering and oppressive and the exhibits remained in good condition.

There were two large tents filled to their utmost limits with the choicest productions of the country's nurseries and gardens, and well known growers from far and near had spared no expense to bring of their best. The crowds that filed past the stands in a continuous stream proved that interest in all branches of horticulture is very strong in the north and the public patronage must have set at rest all doubts as to the future success of the Gala.

## THE ROCK GARDENS.

These were a special feature, and foremost among them was a splendid exhibit by Messrs. James Backhouse Nurseries, Limited (York). The chief point in this striking erection was an extra fine waterfall.



THE FINE EXHIBIT OF HERBACEOUS PLANTS STAGED BY MESSRS. HARKNESS.

The rockwork was composed of water-worn mountain limestone. Very attractive were the Japanese maples and various deciduous trees, among them being the golden oak and Persian plum. There was a mound of heather and silver birch in the centre. A good collection of dwarf rock conifers and fine banks of kalmias and rhododendrons, together with groups of rock roses in various colours were prominent. Silver funkia was placed along the water's edge. Primula Bulleyana and Beesian hybrids were in excellent condition. There was a fine background of spruce and evergreens. A large gold medal was awarded for this exhibit.

Mr. Pickering, a local specialist in rockwork, won two first prizes, one for a charming rock and water garden and the other for a water garden. In the former there was a waterfall, with a background of Japanese maple and copper beech. Campanulas, lychnis, sedums, rock roses, thrift and primulas were well grown and tastefully arranged. Mimulus, irises, thrift, rhododendrons and the Chinese buttercup were chiefly used in the water garden.

Messrs. Wilson and Agar had a very pretty formal garden, with a paved terrace and two flights of steps. There was a semi-circular pool leading to a fountain and at the back of the exhibit an original gargoyle in the form of a frog in lead on a raised wall.

The chief feature in the setting was a neat arrangement of Iris Lord of June, lupins, delphiniums and a number of uncommon alpine. A low wall surrounded the whole garden and there was a foil of fine specimen box.

Mr. P. Gardener had an excellent water garden in which were many choice primulas and a fine lot of Iris Lord of June. It was banked with shrubs, Japanese maples and conifers. His rock garden was built with waterworn limestone and planted with choice varieties of thrift, dianthus, heuchera, brooms and aquilegia.

Other notable rock exhibits were those of Messrs. Maxwell and Beale, and a local exhibitor, Mr. J. H. Winn.

## HERBACEOUS EXHIBITS.

These occupied the same marquee as the rock gardens. They were large and comprehensive and contained the choicest seasonable varieties. Messrs. Harkness and Sons, whose exhibit we illustrate, won first prize, and in this fine display lupins were a prominent feature. Messrs. Gibson also had a choice selection of plants in great variety,

and Messrs. Longster's exhibit was not far behind. These three firms are regular exhibitors at the show.

On many other stands, notably those of Mr. J. D. Hutchinson, Kirbymoorside; Mr. G. A. Millar, Messrs. M. Prichard and Sons, Messrs. Baker's and Messrs. Toogood's, herbaceous plants were to be found in fine condition.

## ROSES.

There has never before been such a fine display of roses at York. There were so many that an overflow tent had to be provided. Messrs. Alex. Dickson and Sons, Limited, showed several new varieties, one of the best of which was Simon, a dazzling red decorative rose. It is more than semi-double, very free flowering, and we understand that it has an ideal bedding habit. Duchess of York, previously shown as Moyna MacGill, is a striking bicolor, and Dame Edith Helen is very sweetly scented, deep rose pink in colour and one of the best for all purposes. On this stand the popular varieties, such as Betty Uprichard, Lady Inchiquin, Los Angeles, Mrs. Herbert Stevens and Golden Emblem were well shown, and the 1925 novelties, Scarlet Glory, a free flowering decorative rose that may be described as a scarlet Donald McDonald; Barbara Robinson, deeper and richer than Clarice Goodacre, with all the latter's good qualities;

Climbing Sunstar, which has the real climbing habit; and Saltaire, a deep crimson with strong growth.

Mr. Elisha Hicks had some very fine specimens in his prize-winning stands, and his best varieties were Ophelia, Clovelly, Mrs. H. Winnett, more pleasing in colour than one usually sees it, and Mrs. Herbert Stevens, which he invariably grows well.

Mr. Prince had a very fine collection and Allan Chandler was particularly well shown. This is a splendid pillar rose, rich in colour, which does not fade. There was also an interesting group of Rosa hemisphaerica, a lovely yellow rose, on this stand.

## SWEET PEAS.

Nothing finer in sweet peas could be wished than the gorgeous displays of bloom set up by Messrs. Robert Bolton and Son, Messrs. Dobbie and Co., Messrs. Alex. Dickson and Sons, and Mr. Henry Eckford. All the popular varieties were in profusion and also many notable novelties.

Messrs. Bolton and Son received a large gold medal for their huge display in which Gold Crest, Black Bess, Peggy, Royal Pink, Wizard, Picture, Ivory Picture, Matchless, Wembley and many others were admirably staged. The first three varieties were awarded a certificate of merit.

Messrs. Dobbie and Co. had Miss California, Powerscourt, Royal Sovereign, Youth, Ruby, Mary Pickford, Grenadier and Royal Purple in fine condition.

Messrs. Dickson's four novelties, Magnet, Crusader, Dainty Maid and Mermaid, were well shown, along with many other varieties.

Mr. Eckford had some well grown exhibition flowers in many popular shades and his new ones were Mrs. John Curwen and Betty.

## CARNATIONS AND PINKS.

Mr. Engelmann had a wonderful display of carnations, and his new variety, Red Laddie, received a certificate of merit. Other new kinds were Dainty and Corola Striata, a striped form of Carola. In this exhibit White Pearl, Topsy, Peerless, Delice, Laddie, White Enchantress, Saffron, Maine Sunshine and Tarzan were all in excellent condition.

Mr. C. H. Herbert had a neat stand of his famous pinks, among which were good vases of Bridesmaid, Model, Mrs. Giffard Woolley, Mrs. G. Walker and Queen Mary. Fire King, a dazzling orange scarlet, was also noticeable on this stand.

## ANTIRRHINUMS.

Messrs. Sutton and Sons had a magnificent stand of antirrhinums, among which we noticed Giant Yellow, Eclipse and Lilac Queen in tall kinds, and Orange King, Buff Beauty and Canary Yellow, in the intermediate section.

Messrs. W. H. Simpson and Sons also had fine antirrhinums and these included good specimens of Lady Roberts, Empress, Golden Gem, Appleby Matthews and Sybil Eckford.

## OTHER EXHIBITS.

The orchids, as usual, were outstanding, and the leading firms had their choicest varieties in excellent condition. Violas were well shown by Mr. Arthur H. Todd and Mr. R. V. Roger. Very interesting was the display of fruit by Messrs. Chas. E. Simpson and Sons, as were also Messrs. Rivers' fruit trees in pots. Messrs. Lowe and Gibson had some fine delphiniums grown from seed of their noted "British Birds" strain. On the stand of Messrs. Storrie and Storrie there were some very interesting subjects, the best being Begonia Narcissiflora, with a narcissus-like trumpet, croton-leaved coleus, and some fine aquilegia. The latter were also very well shown by Mr. V. C. Vickers, who exhibited an interesting new raspberry named The Viking.



# SIMPLE GARDENING

## CALCEOLARIAS AND CINERARIAS.

I HAVE recently been much interested in collections of these charming flowers in several parts of the south coast. I think they are very interesting flowers for the amateur, as well as the professional gardener to grow. The colours are so varied and rich and the blossoms come at a season when conservatory flowers are scarce. As a youth I paid many visits to a neighbour, an amateur, who possessed a very old brick frame, which held a great attraction for me. I saw in it some herbaceous calceolaria plants which always appeared nicely covered with moisture, like dew on the grass, and those plants did remarkably well because their surroundings were so suitable. On this experience I acted in after years when I began, seriously, to make gardening my life work, and refer to it here for the benefit of my readers who may not possess much knowledge of these plants and their treatment. The calceolaria thrives in a quite cool position, in fact it needs a cooler one than the cineraria; its roots are finer than those of the latter and yet I have found my best plants result from pottings in quite heavy loams in which only a small quantity of leaf-soil has been mixed. The present is a suitable time for sowing seeds of both kinds of plants. The seeds should be sown in pots or pans, very thinly, the calceolaria seeds being simply pressed into the level surface of the soil after the latter has been watered. Of course, a hot position is bad for both seedlings and plants, and failing such for the garden frame, I would create such a position even if I moved a frame to the north side of a row of peas or runner beans. Full light should reach the seedlings, but not any direct rays from the sun. First transplant the seedlings round the sides of small or 6in. pots and then pot them singly in 3in. ones.

## BULBS IN GRASS AND WHEN LIFTED.

There are people who love bulbs in the flower garden, but do not grow them because they interfere with the summer bedding-out arrangements. If the latter is of more importance than the bulbs, then the bulbs are sure to suffer a little, if grown. But there is a right way to treat the bulbs and few cultivators carry out this treatment as it should be. They generally lift the bulbs quite early and "heel" them in in some out of the way border for several weeks, thus exposing them to the influence of the moist soil, which causes new roots to grow prematurely and matters are made worse if rain comes in the meantime. In due time these bulbs are again lifted and re-planted and this work cannot be done without serious destruction of the new, fleshy roots. The better plan is to lift the bulbs as late as possible consistent with the forwarding of the work of bedding-out other kinds of plants. No doubt the great majority of the bulbs are now lifted and many of them are being neglected. Collect every one and place them in boxes or on the

floor of some cool shed—an open shed will be the most suitable. Do not forcibly remove the tops nor any soil adhering to the roots. These bulbs are to remain in position till they have gradually and thoroughly dried, when the stems may be removed and the plump, glossy-looking bulbs should be placed in paper bags. The bulbs in pots should be left there till properly ripened, and to ensure this the pots must be placed on their sides in a sunny position all being kept quite dry. The leaves of bulbs grown in grass and woodland should be allowed to wither naturally before any trimming, for the sake of tidiness, is done.

## STAKING PLANTS.

It is quite an accomplishment to be able to stake growing plants so that their natural form will not be altered, and, of course, not marred. It does not matter much whether the subjects are border or climbing plants, but if care be needed in dealing with one class more than another, it should be given to the border



plants, as climbers are always persistent in trying to get out of bounds and so faulty tying is not as apparent as in the case, say, of herbaceous plants. Where stakes are used they should be painted dark green and green tying-material used, then, if the supports are well placed and the tying is neatly done, the general effect will be pleasing. It is not a question of number of stakes, but of their disposal, as few as possible should be used consistent with efficiency. In some districts stakes are difficult to obtain, in others they are plentiful. We will suppose that they are scarce and only one can be used where three should be. The single stake should be placed at *b*, at the side, or outer edge of a branching plant or clump of them.

The raffia or string should be made secure to the stake, passed round the clump and tied near the stake, thus holding all stems loosely, but firmly. The three stakes may be placed as shown at *d, d, d*; the string placed circle wise all round the clump and, if the latter is massive, through it from stake to stake, as shown at *e, e, e*. It is wrong to fix a single stake in the centre of a circle *f*, as at *g*, and showing at *h*, tied at *i*, as the result would be unsightly specimens. When staked the clump should look like the one *j*. Tying climbers to rough stakes is easily done if the strings are passed round them about big knots as shown at *k, k, k*.

## HOW TO MANAGE GLASSHOUSES IN SUMMERTIME.

I am induced to include this subject in my collection of notes because I have seen so many glass structures mismanaged year after year. Some are totally neglected; others are not shaded, neither are they properly ventilated, nor the plants in them suitably treated. In the winter time it is pleasant to enter a warm greenhouse; in midsummer it is torture to do so when the sun is shining on a mismanaged one. I need not repeat why it is a torture. If the roof glass and, maybe, a portion of the sides and ends be slightly shaded, either with permanent or temporary shading material, the floor duly damped, the plants watered as they require it and the ventilators manipulated according to the prevailing weather conditions, a visit to the occupants would be just as pleasant on a really hot day as in the depth of winter. Generally, if it is unpleasant for one to be under glass on a hot day, it is equally bad for the plants there. From the end of June to the end of August, night ventilation is beneficial to miscellaneous greenhouse and conservatory plants, and this night airing should be duly increased early in the day in very bright weather. Morning and early evening waterings are best; avoid mid-day ones, because the roots are warm, and pipe, well or cistern water is much colder and would cause a check; but water then rather than allow the plants to suffer, using water that has been placed in vessels in the same house. A mid-day damping of borders, under stages or floors, is highly beneficial to the plants.

GEORGE GARNER.

## CORYLOPSIS PAUCIFLORA.

DURING early spring this delightful little shrub was most attractive. It is of somewhat spreading habit, growing about 4ft. high, but the plants I have seen have not exceeded 3ft. The flowers are produced on twiggy, leafless branches, these being practically covered with primrose yellow blooms three-quarters of an inch across. They are usually in pairs, and hang down, so to see them at their best they must be viewed from beneath, which suggests an elevated spot on the rock garden. In the milder parts of the country it will succeed, and should be afforded a position protected from the north-east and east winds. Any good garden soil will suit it. *C. pauciflora* is allied to *hamamelis*, but it is not so hardy.

T. W. B.



## CONSERVATORY AND GREENHOUSE

**GILIA CORONOPIFOLIA.**—This beautiful biennial is deserving of more general cultivation for furnishing the conservatory, and for this purpose seed should be sown now in a cool greenhouse.

When fit to handle the seedlings should be pricked off singly into thumb pots, affording water carefully until they are well rooted. Their next shift should be into sixty-sized pots, in which size they should be wintered. During the winter they require very careful handling, for, in common with many Californian plants, damp proves fatal to them during our sunless winter months. A shelf well up to the roof glass in a light, airy house is the most suitable position for them, and no more water should be given at the root than what is necessary to keep them from suffering. It is also important that the foliage be kept dry. Early in the year they should be ready for a shift into their flowering pots, which may be 5in. or 6in., according to the strength of the plants. When well established and under improved weather conditions they will take increased supplies of water, but care must always be exercised with this plant.

**REHMANNIA ANGULATA.**—Where this plant is grown for conservatory decoration seed should be sown this month in a cool greenhouse. When fit to handle, the seedlings should be pricked off singly into small pots, afterwards potting them on as they require it. As this plant is nearly hardy, it may be grown successfully in a cold frame. Well grown examples will require 7in. or

8in. pots for their flowering size. This plant is very useful, as it flowers over a long period; there is also a fine white variety of it.

**BRUNFELSIA (FRANCISCEA) CALYCINA** and its varieties *eximia* and *macrantha* are generally regarded as stove plants, and are treated as such. They, however, succeed perfectly in an ordinary greenhouse during their flowering period, flowering in wonderful profusion for several weeks. *B. macrantha* is undoubtedly the best one to grow for this purpose. Cuttings root readily in a warm propagating case. Throughout the growing period they are best kept in an intermediate house, while during the winter they should be kept somewhat dry at the root, but must not be allowed to suffer in this respect. This plant has the advantage of flowering early, plants in small sixty pots flowering freely. In two or three years good useful plants for the stages can be obtained. They also have the advantage of being long-lived, for with annual re-potting the same plants may be grown in 6in. or 7in. pots for a number of years. On the other hand, if so desired, they may be grown on to form large specimens. It is also an ideal plant for planting out in a well drained bed or border in a warm greenhouse. *B. americana* is quite distinct from the other species, having sweet-scented flowers which are yellow when they first open, afterwards changing to white. This plant is worthy of more general cultivation, is easily propagated by means of cuttings, and succeeds under the same treatment indicated for the other species.

**SCUTELLARIA COSTARICANA.**—Than this plant, with its scarlet flowers tipped with gold, there are few more brilliant for the decoration of the greenhouse. Cuttings root readily at any time in a warm propagating case. They are best grown in a temperature of 50° to 55°, and as they approach their flowering period should be gradually accustomed to cooler conditions. The young plants should be pinched once or twice to induce them to throw strong shoots from the base, and these should be allowed to run up without stopping. Good examples may be flowered in 5in. or 6in. pots. This plant grows freely in any good potting compost. *S. violacea* and *S. coccinea* treated in the same way are also excellent for the greenhouse. They are all subject to attacks of white fly, which must be prevented by fumigation with hydrocyanic acid gas or some other approved remedy.

**ISOLOMA HIRSUTUM**, which has been in flower for at least two months, is another excellent plant for the greenhouse, and by rooting successional batches may be had in flower all the summer. Cuttings root readily in a warm propagating case, and should be grown on in a temperature of 50° to 55°. To do them justice they should be placed in 6in. pots for flowering. Well grown plants will in time attain a height of 3ft. to 4ft. At this stage they may have a shift into 8in. pots, in which they make fine specimens for standing in beds in the conservatory. If given proper attention this plant will flower for at least six or eight months. J. Courts.

## LABOUR - SAVING IN THE GARDEN

### A USEFUL ATTACHMENT FOR A LIGHT LAWN MOWER.

**T**HERE are now a number of efficient edge trimmers on the market which combine trimming and truing the edge of the lawn, and are a great improvement on the old-fashioned edging knife and long-handled shears. Even with the use of these the last few inches at the edge of the lawn are troublesome to cut if a side wheel lawn mower is used. It has to be done either by hand or else the lawn mower cuts it with one of its wheels partly off the lawn, a state of affairs which is neither good for the edge nor for the mower. A patent attachment is now being sold by a number of firms. It is known as Slatter's Patent Front Runner, and enables a side wheel mower to be used for cutting close up to the edge of a lawn.

### SPRAYING ON A SMALL SCALE.

During the early summer months to keep down biting and sucking insects, which attack fruit trees of all kinds, spraying is essential. Aphis particularly become very active, and unless kept in check in the early stages of development, much damage will be done to the plants later on. Regular and timely spraying as preventives rather than cures should

be aimed at. An efficient spraying machine suitable for the kind of work and the amount it is required to do should be in readiness at all times. Many amateurs do not wish to buy, and do not need a large knapsack machine. These are unnecessarily heavy, and a smaller make, even though it has to be refilled oftener, is much more convenient for use in a moderate-sized garden or in the amateur's greenhouse. The Vermorel pneumatic hand sprayer is ideal for such a purpose and of great service in every type of spraying. It is light, easy to manipulate and can be obtained in two sizes. The larger is made of brass and the smaller of copper. The capacity of the machines are 3½ and 2½ pints respectively, and they weigh 5½lb. and 2½lb. When pressure has been established all the contents are expelled in a continuous spray.

### A TIME SAVING DEVICE.

Peach disbudding, nailing up young shoots of wall fruit and countless other odd jobs in fruit culture which mean a cut here or a tie there are tasks which take up a considerable time. Only a small area can be reached when the ladder is in one position, and to attend to the lower portions of the trees a

shorter ladder has to be used. Being obliged to use a different type of ladder for the lower branches and the constant moving which is necessary involve the loss of a certain amount of time. And, again, a ladder which is suitable for resting against a wall cannot be used, for instance, in the pruning of the top of the branches of bush apples. For this a step ladder is necessary. A most convenient ladder which combines both types is known as the Handy 2 in 1 Ladder, and it certainly is a very useful and time-saving invention, to say nothing of the money saved by being able to make one ladder do the work of two. This ladder is hinged in the middle, the top half bending over and forming a step ladder. As it thus has steps on each side when in the step ladder position, a larger portion of the tree can be reached before moving again. The hinge is made of heavy unbreakable steel, and automatically locks itself in both positions and is absolutely secure. When the ladder is used as a pair of steps the top step is extra wide and can be used for standing a bucket on. There are many times when such a ladder will be useful—in the vinery, for pruning, for training wall fruit and for reaching the shelves in the greenhouse are only a few instances.





## Banish White Fly

Snow Fly on Tomatoes and Cucumbers can easily and safely be eradicated by means of Abol White Fly Compound. No apparatus needed. Simply pour the Compound down the centre path of the House at the rate of  $2\frac{1}{2}$  fluid ozs. to 1,000 cubic feet of space.

Sold in round tins as under. When reckoning quantity required allow  $\frac{1}{4}$ -pint for each 2,000 cubic feet.

Size	Price	Postage
$\frac{1}{4}$ -pint	1/-	6d.
$\frac{1}{2}$ -pint	1/9	6d.
Pint	3/-	9d.
Quart	5/-	9d.
$\frac{1}{2}$ -gallon	8/-	1/3
Gallon	15/-	2/6

Of all Nurserymen, Seedsmen, Florists, Ironmongers, Chemists and Stores. Abol Limited, 9, Beltring, Paddock Wood, Kent.

Write for descriptive Folder.

**Abol White Fly Compound**

## ORDER OF THE EXECUTORS. FOR SALE. LYNNMOUTH, NORTH DEVON.

Handid house. Delightful situation. Glorious views. Exceptionally attractive RESIDENCE standing in the Tors, with south aspect, and containing hall, three reception rooms, six bedrooms, bath-room, and offices. Site for arage. Good water supply. Modern sanitation. Delightful pleasure grounds including **INE ROCK GARDEN** which has been the life-long hobby of the late owner and is fully stocked with the choicest of plants, flowering trees and shrubs, and beautiful undulating woodlands.

**ALL ABOUT 13 ACRES.**

Agents: HARRODS, Ltd., 62-64, Brompton-road, S.W.1.

# REAMSBOTTOM'S ANEMONES

Gold Medal St. Brigid

(None Genuine without our Gold Medal Seal.)

12, 3/-; 25, 5/6; 50, 9/6; 100, 18/-


Plant now for bloom from late Summer onwards throughout Autumn and Winter.

Miss Campbell, Harewood, Seaton, Feb. 21st, 1925 writes:—"The St. Brigid Anemones I had from you (MAY, 1924) were VERY beautiful and are in bloom now."

Please write for Current Price List of Choicest Flowers for planting now.

PLEASE MENTION "THE GARDEN" WHEN WRITING.

REAMSBOTTOM & CO., TOWER NURSERIES, WEST DRAYTON, MIDDLESEX.



## KILL those WEEDS!

You can destroy weeds with Weedicide—clear the garden paths, drives, etc., and do it quickly with the weedkiller that has been "Highly Commended" by the Royal Horticultural Society.

### COOPER'S WEEDICIDE

1 gall. (price 9/-) dilutes to 100 galls. water; the cost of the ready-for-use weedkilling mixture is, therefore, just over 1d. per Gallon.  
1 pt. tin 2/-; 1 qt. 3/3;  $\frac{1}{2}$  gall. 5/6; 2 galls. 17/-; 5 galls. £1 18/6


**HERCULEAN LIQUID WEEDKILLER**  
is equally efficient but half the strength (1-50 parts water)  
Pt. 1/8; Qt. 2/9;  $\frac{1}{2}$  gal. 3/9; 1 gal. 6/-; 2 gals. 10/6

**HERCULEAN POWDER WEEDKILLER**  
Small tin to make 12 $\frac{1}{2}$  galls. 1/9; Medium size to make 25 galls. 3/-; Large size to make 100 galls. 11/-

If unable to obtain from local agent, please write  
**WILLIAM COOPER & NEPHEWS, Ltd., BERKHAMSTED.**

THE PIONEERS OF ALL THAT IS BEST IN LAWN MOWERS

## GREEN'S "SILENS MESSOR" LAWN MOWERS



Est<sup>d</sup> 1835

# GREEN'S


By Special Appointment To His Majesty the King.

## GARDEN ROLLERS & TENNIS MARKERS

Note the Model de Luxe "Silens Messor" Hand Lawn Mower fitted with Ball Bearings, etc., in List.  
Over a Million Sold.

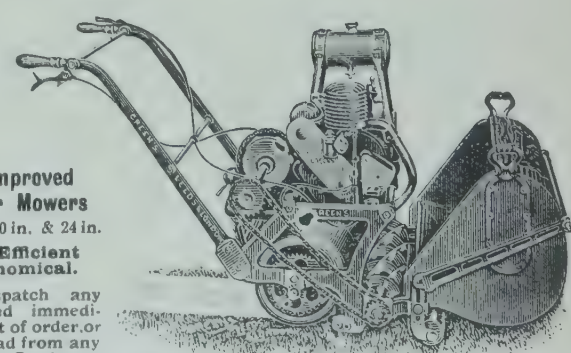
### GREEN'S New Century Lawn Mower

The Ideal Mower for small lawns, slopes, banks, &c.



WORLD FAMOUS LAWN MOWERS

Please write for Illustrated Price List No. 8, free.



### MOTOR MOWERS

Made in Sizes 24 in. to 42 in.

Green's Improved Light Motor Mowers  
Sizes—16 in., 20 in. & 24 in.  
Reliable, Efficient and Economical.  
We can despatch any machine listed immediately on receipt of order, or they may be had from any Ironmonger or Seedsman in the United Kingdom.

THOMAS GREEN & SON, Ltd., Smithfield Ironworks, Leeds, and New Surrey Works, Southwark Street, London, S.E.1.

Please mention THE GARDEN when writing.



"NEVER WORKED SUCH A SATISFACTORY AND ECONOMIC GREENHOUSE HEATING APPARATUS AS YOUR

## 'HORSE SHOE' BOILER"

WRITES ONE OF THE MANY ENTHUSIASTIC OWNERS.

"I have two, one heating a long Vinery and one a little Hothouse. Last autumn 12/- worth of slack finished off the Grapes, and we sold £3 worth, besides what I gave away. This spring all seeds raised in a case over the boiler in the hothouse . . . fires set tied up about 5.30 require no attention till 7.30 next morning. I thought we ought to let you know this."—May 7th, 1924. Miss—, Traverston, Nenagh, Co. Tipperary.

Why not investigate the sterling qualities of the "HORSE SHOE," and get that heating proposition settled now?



Used in the  
R.H.S. Gardens

To CHAS. P. KINNELL & CO., LTD.,  
Engineers, Southwark Street, S.E.1.  
Please send me Booklet E "Making the most of your Greenhouse," and price of complete Outfit to suit (span-roof) (lean-to) greenhouse . . . long . . . wide inside, sides of (wood) (brick) . . . thick.

Name . . . . .

Address . . . . .

\*Strike out particulars not needed. Cut out and send by *id.* post.

Wire:  
"Kinnell-Boroh-  
London."

CHAS. P. KINNELL & CO., LTD.  
65, SOUTHWARK STREET, LONDON, S.E.1

\*Phone:  
Hop 362  
(Three lines).

### SOIL PESTS DESTROYED

by "ALPHOL"  
Sample 14 lb., 3/6 carr. paid

Write for particulars of this and other reliable Garden  
Helps, Lawn Improvers, "Veribest" Seeds, etc., to  
Garden Supplies, Ltd., Cranmer St., Liverpool

**HOW TO HEAT YOUR HOUSE.**—By Edwin  
Gunn, A.R.I.B.A. Better Lighting—Cheaper Fires—Hotter  
Baths—Healthier Air. Just Published, 2/6 net.—Published at  
the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street,  
Covent Garden, W.C.2.

**THE CULTURE OF CHRYSANTHEMUMS.**  
By W. WELLS, 2/6 net; cloth, 3/6 net; by post 6d. extra.  
—Published at the Offices of "COUNTRY LIFE," LIMITED,  
20, Tavistock Street, Covent Garden, W.C.2.

## THE NEW COMPLETE LIST OF GARDEN BOOKS

Published by "Country Life"

IS NOW READY

FREE ON APPLICATION TO THE PUBLISHERS,  
20, TAVISTOCK ST., COVENT GARDEN, W.C.2

## FOURTH ANNUAL GREAT FLOWER SHOW KELVIN HALL, GLASGOW.

Promoted by the Corporation of the City of Glasgow in con-  
junction with Glasgow and West of Scotland Horticultural Society.

TO BE OPENED BY  
**THE LADY MAUD CARNEGIE**  
(H.R.H. THE PRINCESS MAUD)

**SEPTEMBER 1st, 2nd & 3rd, 1925**

**424 COMPETITION CLASSES**

**VALUABLE PRIZES** in addition to  
**CUPS, TROPHIES,**  
**and MEDALS.**

For Schedule of Competition Classes  
apply to—

**J. CARRICK KERR, Secretary,**  
46, GORDON STREET, GLASGOW, C.1.  
—ENTRIES CLOSE 18th August.—

For Prospectus and Particulars of space  
available for TRADE EXHIBITORS of GARDEN  
REQUISITES, SUNDRIES, ETC., apply to—  
**CECIL SOMMERVILLE, General Manager,**  
KELVIN HALL, GLASGOW, C.3.

Please mention THE GARDEN when writing

## FRAME - ROOTED STRAWBERRIES

In a contemporary I noticed the words:  
"In many districts here in the north,  
is almost impossible to have runners of  
sufficient size and well rooted in time for  
August planting." I suppose the word  
"north" means Scotland. To show how  
to overcome this difficulty and have straw-  
berry plants for August planting is the object  
of this note.

Early in July we go over our plantation  
and select the best runners. Now, numbers  
of the runners do not have many roots at  
this time, therefore we make a point when  
severing the stems to cut so that zins. of  
it will be left on each detached plant. It is  
hardly necessary to point out to practical  
men that a dull day is most suitable for  
this work. But in any case the runners or  
plants should not be unduly exposed to warm  
sunshine or drying winds. These runners  
should be set out in lines fairly close together  
in a cold frame, and the zin. portion of stem  
on each plant should be bent down into the  
soil; this helps to anchor those runners  
which have only a few short and partly de-  
veloped roots. A thorough good watering is  
given the runners as soon as they are planted,  
and the frame lights put on. The frame is kept  
closed and the runners and sides of the frame  
occasionally sprayed in the afternoons of  
warm days. This practice and that of shading  
the plants from bright sunshine must be kept  
up for at least two or three weeks. In the  
warm and genial atmosphere of the frame  
the runners root freely and the young leaves  
unfold, both sure signs of the plants doing  
well. It is necessary when admitting air  
to do so gradually at first until the plants  
are fairly hardened, then we remove the frame  
lights entirely. By the second or third week  
August the young plants should be set  
out in their permanent places in the open  
ground.

DAVID ARMSTRONG.

## THE ORANGE ERIGERON

A PRETTY little erigeron which deserves  
the consideration of those desirous of  
adding a dwarf, free-flowering, pretty plant  
to their gardens, either by purchase of  
plant or two or by sowing a packet of seeds  
is the orange erigeron, *Erigeron aurantiacus*.  
It is excellent for the front of the border  
either as an edging or in small groups  
it can be used for permanent bedding  
and it is quite in place in the rock garden.  
It is very distinct in colour from most  
of its allies, which generally give flowers  
of shades of purple, blue or white, as it  
blooms are of a good orange. The  
flowers gave much pleasure, and my only  
trouble was that I was living in a district  
where not only slugs were plentiful, but the  
big snail—called, I believe, *Helix aspersa*—  
was most troublesome, and, as the erigeron  
apparently gave a novel flavour, these pests  
as their manner is, apparently considered  
that the orange erigeron was to their taste  
and cropped the plants pretty severely.  
As the novelty wore off they were less voracious,  
but in autumn and spring they had to be  
carefully watched for and destroyed. From  
its hybridisation with other species, *E. aurantiacus*  
hybridus has been acquired, and the  
plants of this stock are of various shades of  
orange, etc. They are generally taller than  
*E. aurantiacus*. Seeds can be sown in the  
open up to the end of June, but better results  
are obtained by sowing under glass in pots  
or boxes, pricking out the seedlings as soon  
as they can be handled and growing on until  
planting out in autumn where they are to  
bloom.

S. ARNOTT.









## For Your Garden—Now

**D**URING these summer months you will want your garden to look its best. It will if you follow the plan of wise gardeners and *make sure* that your lawns and flowers are healthy and free from insect pests, etc. You can do this if you use systematically "Ferry" garden necessities. They will give you the best results. For years they have been the choice of many leading horticulturists—men who know. Send a trial order to-day. Full directions for use supplied.

### INSECTICIDES & FUNGICIDES

keep your flowers, vegetables and trees perfectly clean and healthy, free from Fly, Blight, and other pests.

The "Ferry" Soil Pest Destroyer.—Dig this in at the time you turn over the soil, and use as a surface dressing later. 14-lbs. 3/-; 28-lbs. 5/6; 56-lbs. 10/6; 1-cwt. 20/-

The "Ferry" Insecticide, the non-poisonous spray for plants, flowers, fruit trees, vegetables, etc. 1-gal. 7/6; 2-gals. 14/-; 5-gals. 33/-


Use a

"FERRY" SYRINGE  
20in. by 1in. with bent nozzle, 10/6

### LAWN SAND

Dense, Green and Velvety Lawns will be yours if you use occasionally the "Ferry" Brand Lawn Sand.

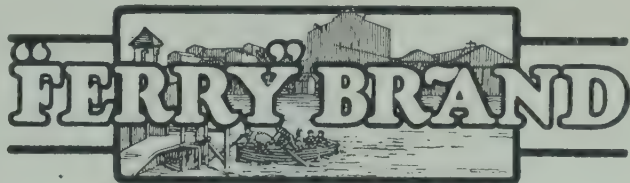
Destroys all weeds; acts as fertiliser to the grass. 7-lbs. 3/-; 14-lbs. 5/6; 28-lbs. 9/6; 56-lbs. 17/-; 1-cwt. 28/-

 Carriage Paid for cash with order to your nearest Railway Station in England and Wales.

### WEED & WORM KILLERS

"Ferry" Weed Killer in liquid and powder forms. LIQUID—1-gal. 8/-; 2-gals. 15/- POWDER—To make 25-gals. 4/3; 100-gals. 15/- "Ferry" Powder Weeder to be used only on sloping paths and carriage ways.

14-lbs. 5/6; 28-lbs. 9/6 "Ferry" Worm Killer in two forms. To be used liquid—to make 25-gals. 5/3; 50-gals. 8/9. To be used as powder, non-poisonous—a great Grass Invigorator. 28-lbs. 6/6; 56-lbs. 12/-



THE BRITON FERRY CHEMICAL & MANURE CO., LTD.  
Briton Ferry, South Wales. (Est. 1886)

**"TRY 'FERRY' FIRST"**

Please mention THE GARDEN when writing.

## THE PATTISSON HORSE BOOTS

**SIMPLEST  
STRONGEST  
MOST ECONOMICAL**

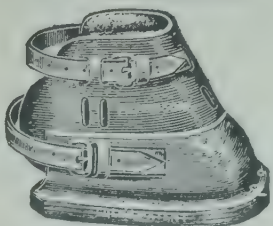


Fig. 2—Well Pattern.

Illustrated Price Lists from the Makers:

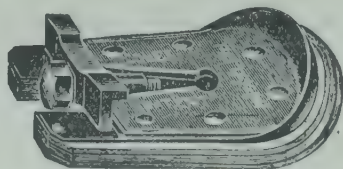


Fig. 1—For Shod Horses.

Best English Leather or Rubber Soles.

Used for many years in the Royal and in thousands of the Principal Gardens.

Silver Medals:—Royal Horticultural Society, 1904 and 1914  
Royal International Horticultural Exhibition, 1912.  
HUNDREDS OF TESTIMONIALS.

**ONCE TRIED  
ALWAYS USED**



Fig. 2—No Well Pattern

**H. PATTISSON & CO., Streatham, LONDON, S.W.16**

Please mention THE GARDEN when writing.

### Notes from Maidstone.

#### CAMPANULAS.

The Dwarf Campanulas are a most useful and satisfactory group of rock plants.

The season opens with Alyssum, Aubrietias, Saxifrage and Rock Roses, and when their splendour begins to wane, the Campanulas are just coming into bloom. We can recommend the following:—

Garganica, its varieties *hirsuta* with silvery foliage and *W. H. Paine*, *kewensis*, *muralis*, *pulla*, *pulloides*, *pusilla*, *rhomboides*, *Stansfieldii*, *carpatica* *Riverslea* and *White Star*.

We can offer the above collection, all pot grown plants, for 12/6, packing free and carriage paid.

We can also offer the somewhat rare *Campanula nitida*, 3/6 each.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.



## Banish White Fly

Snow Fly on Tomatoes and Cucumbers can easily and safely be eradicated by means of Abol White Fly Compound. No apparatus needed. Simply pour the Compound down the centre path of the House at the rate of 2½ fluid ozs. to 1,000 cubic feet of space.

Sold in round tins as under. When reckoning quantity required allow ½ pint for each 2,000 cubic feet.

Size	Price	Postage
½ pint	1/-	6d.
1 pint	1/9	6d.
1 pint	3/-	9d.
Quart	5/-	9d.
½-gallon	8/-	1/3
Gallon	15/-	2/6

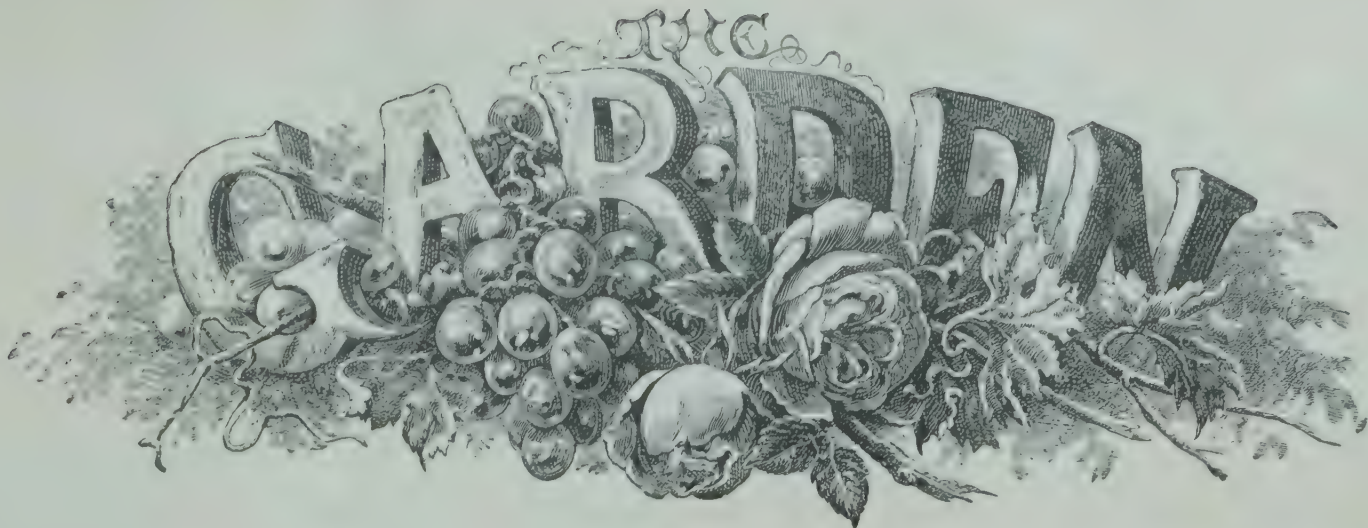
Of all Nurserymen, Seedsmen, Florists, Ironmongers, Chemists and Stores. Abol Limited, 9, Beltring, Paddock Wood, Kent.

Write for descriptive Folder.

**Abol  
White Fly Compound**

Please mention THE GARDEN when writing.





VOL. LXXXIX.—No. 2798.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
*Editorial Offices:* 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. *Offices for Advertisements:* 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
 Entered as Second-class Matter at the New York, N.Y., Post Office.

JULY 4, 1925



IN ALL GARDENS, BE THEY EVER SO SMALL, A CORNER SHOULD BE FOUND FOR THE OLD FASHIONED SWEET SMELLING SHRUBS AND FLOWERS. BUSHES OF ROSEMARY AND LAVENDER WITH THEIR TIME HONOURED CHARMS, DRIFTS OF CLIMBING ROSES IN THEIR FULL SUMMER GRANDEUR, WITH STATELY SOMBRE IRISH YEWS AS SOLEMN SENTINELS, MAKE AN ENCHANTING SETTING FOR ANY WILD GARDEN.



# The ROCK GARDEN in EARLY SUMMER

WITH A LITTLE CARE AND ATTENTION DEVOTED TO THE INMATES OF THE ROCK GARDEN IN THE EARLIER MONTHS OF THE YEAR, THE RESULTS ACHIEVED IN THE SUMMER SEASON IN THE SHAPE OF A WEALTH OF COLOUR AND BLOOM ARE TRULY ASTONISHING.

**T**HOUGH the roots of twitch and bindweed may defy all efforts at extraction, twisting and twining to an unbelievable length beneath the stones you least wish to move, the personal cultivation of a rock garden brings with it a wonderful feeling of creative satisfaction, and memories of long past expeditions to the enchanting mountains of Norway. Switzerland and Austria, each tiny plant seeming to smile at you in recognition of the thought and care bestowed upon it,

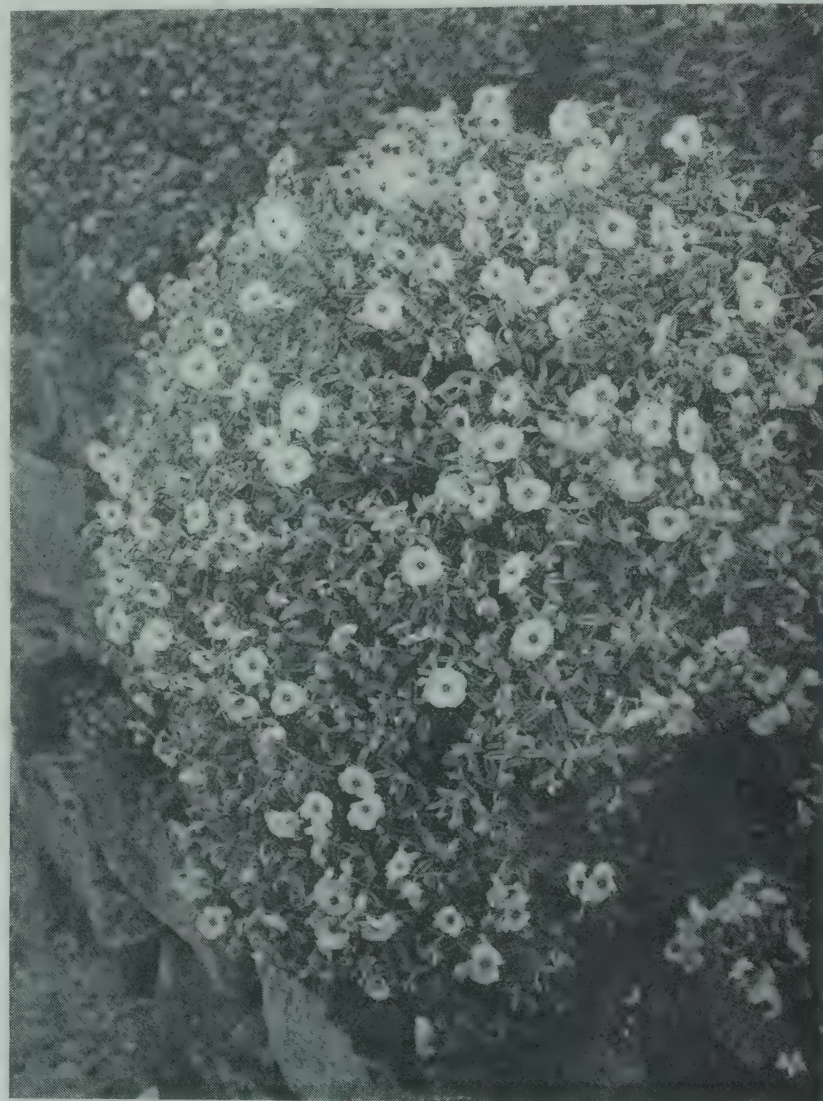
The frequent thunderstorms during the recent heat wave have kept the rock garden well moistened, and those alpine gardeners who delayed until the beginning of April to fill in the crevices left bare by the ravages of the wet winter have been well rewarded. Plants such as *Soldanella minima* or *alpina*, *Androsace carnea* and *Saxifraga oppositifolia* turned out of their pots well rooted, have suffered no check to their growth, and now flourish exceedingly.

The cool northern slopes are clothed with the green carpet of *Arenaria balearica*, with its myriads of tiny white flowers on slender stems not more than in. high; while nothing could be of a purer white than the large bell-like flowers of *A. montana*. All the varieties of low-growing phlox are now at their best, palest pink, lavender, and white, and grow satisfactorily if in an open place where they are not tempted to straggle about for light and air. They seem rather to enjoy being compressed between small rocks or large stones, and grow in more compact, pleasing masses. One of the most beautiful is *Phlox nivalis*, but this will have suffered in most gardens from the damp mild winter, so that cuttings should be taken whenever possible, as it does not seed freely.

The mossy saxifrages are past their best, but where they are not dried and over-heated they remain a glory even into June. Perhaps the best is *S. muscoides*, and its variety *atropurpurea*. At the present time they press closely against their surrounding stones, throwing up innumerable short stems with little pink blossoms, very neat and easily grown. When

the flowers die off, the plants do not straggle about and become untidy as do most "mossies," but the closely packed foliage turns at the approach of autumn to a pleasing crimson and sober green.

The same pleasure may be obtained from the foliage of *S. Rhei*, and its variety *Guildford Seedling*, no less than from



DURING THIS MONTH THE SUN ROSES, OR HELIANTHEMUMS, ARE AMONG THE MOST BEAUTIFUL PLANTS IN THE ROCK GARDEN.



SAXIFRAGA LONGIFOLIA, FROM THE PYRENEES, THE FINEST OF THE ENCRUSTED SAXIFRAGES.

their flowers, both of which keep their colour better when not in full sun. *S. Wallacei*, on the other hand, cannot boast of this neatness of growth, but repays any trouble a gardener may take in rearing new plants. It grows rapidly and is apt to become ragged, dying off in the centre; but plants of not more than two or three years' growth are now of great beauty in the rock garden, transforming their corners into sheets of dazzling white with really large well opened flowers.

Of more interest, undoubtedly, are the encrusted saxifrages, so called from the fact that the pores on the leaves are encrusted by the chalk, taken in through the roots, crystallising and blocking the opening, thus preventing excessive evaporation during hot sunny weather, as the plants live on dry stony heights.

The best of all these is *Saxifraga longifolia* from the Pyrenees, which grows well when planted in a tight crevice with plenty of limestone chips and mortar rubble in the loam, and with a deep root run. It never sends out offshoots, but grows readily from seed planted either in autumn or spring, and will not flower during its first twelve months. When



the plant is mature, however, and the long, whitish green outer leaves are spread out like a star, it will throw up from its closely packed centre a pyramid of blossom, a hundred or more pure white flowers, borne on a stem from 1 ft. to 1½ ft. high, most beautiful and uncommon in form. The seeds should be collected daily, as those from the lower flowers ripen first and fall before the higher seed vessels have matured.

*SS. lingulata*, *crustata* and *Aizoon* are all valuable and of great beauty at the end of May and in June. Though they are of looser growth, and the flower heads shorter and less densely packed with flowers, they creep round the stones in a most dainty way when well established. Some brought back from the Riffel Alp in 1908 are now quite naturalised. They have seeded about in the chinks of rock, and everywhere have spread into masses of silver or grey-blue stars, the smaller nestling among the more mature, which throw up spikes of white flowers of a loose but graceful growth, the stems of *S. lingulata* being of an attractive reddish colour from about 10 ins. to 1 ft. high.

*S. rotundifolia* is another rockfoil which has spread and increased since it was brought back in 1908 from the Riffel Alp. Planted in the cool damp corners of the rock garden it throws up innumerable pink-spotted small flowers, as in the sub-alpine woodlands. There are some tiny varieties growing after the manner of the robust London Pride, each small tuft giving off a head of pale pink, fragile flowers; these easily increase and fill steep crevices.

All the varieties of *sempervivum*, too, are now at their best, from *S. Tectorum*, the common houseleek, native in the great mountain ranges of Europe, to the cobweb *S. arachnoideum*, that attractive plant that looks as though it employed a troop of spiders to bind together its fleshy, succulent leaves in a meshwork of fine white threads. Apparently

this is a provision of nature to hold the leaves more erect, and so to ensure that the sunlight should fall obliquely on the upturned surfaces; thus, excessive evaporation is checked when the plants live in arid rocky heights. Just as the encrustation of the silver saxifrage becomes less when moisture is plentiful, so the cobwebbing of *S. arachnoideum* diminishes if it grows in a cooler, damper situation. This species, like *S. montanum*, has picturesque



SAXIFRAGA WALLACEI IN SHEETS OF DAZZLING WHITE ALONG WITH ANEMONE BALDENSIS.

face; thus a well naturalised colony appears to be handing its children across the face of the precipice, with human care for the preservation of its offspring.

Many of the silenes, helianthemums, daphnes, androsaces, and geums are now in full flower; and our native beauty of the limestone rocks of Scotland, *Dryas octopetala*, must not be forgotten. Then the Gentians, *acaulis* and *verna*, together with the vivid blue of *Lithospermum prostratum*, make a remarkable blaze of colour if they have condescended to thrive. Deep moisture, perfect drainage, exposure to sun and air, protection from devastating winds, deep loam with sand grit and leaf-mould, a good top-dressing when the flowers are over—and in the case of the gentians cut from their stock, all these are demanded—and such attentions are, as a rule, repaid by a glory of surpassing loveliness.

Lightness and variety are produced by allowing the white *Anemone alpina* to seed itself where it will in the rock garden, and if *A. baldensis* and *A. narcissiflora* can be persuaded to do the same, the result is as perfect as can be obtained. It is of enormous advantage to back the rock garden with a few tall plants, such as aquilegias, iris, white foxgloves, yuccas, Martagon and St. Bruno's lilies, with the alluring spikes of the various species of *eremurus*. These thrive and readily increase where they are happy, and give distinction and pleasure by their 10 ft. spikes of pink buds, opening from below into fascinating, long-anthered, pale pink flowers, each petal centred by a deep ridge of darker pink, and each characteristically pressed backwards as if to show its full glory.

Thus, by a judicious selection of plants, the rock garden can be made a perfect joy in June and July.

CHRISTINA  
MARSH.

rose-coloured flowers, while those of *Wulfeni* and *Gaudini* are yellow. They make a beautiful decoration in shallow pans of grit, chips and sandy loam, but if grown in the rock garden their methods of finding fresh ground over the bare face of small rocks, when their own niche has become overcrowded, is of great interest. So long as there is room surrounding the original rosette, the runners sent out produce a fresh rosette and root immediately around the parent; but later, when the dense mass of rosettes can no longer expand for lack of root room, the runners grow longer and longer till they reach a fresh crevice over the rock



THE COMMON HOUSELEEK, SEMPERVIVUM TECTORUM.



SEMPERVIVUM ARACHNOIDEUM WITH ITS CHARACTERISTIC WHITE COBWEB.



# THE ROBERTSONIAN SAXIFRAGES

BY DR. R. LLOYD PRAEGER.

THE well known London Pride group of saxifrages consists of just three species, all common in cultivation—the kidney-leaved saxifrage (*S. Geum*), the London Pride (*S. umbrosa*), and *S. cuneifolia*, which has not a recognised English name. Haworth (1812) placed them in a separate genus, which he called *Robertsonia*; Tausch (1823) named them *hydatia*, and Don (1822), *gymnopera*; but all subsequent botanists follow Linnaeus (1737), in including them in the great genus *saxifraga*. All three are confined to central or western Europe, where they have very distinct ranges, *S. cuneifolia* being abundant in the Alps and surrounding regions and extending to the Pyrenees, while *S. umbrosa* and *S. Geum* are confined to the Pyrenean region and Ireland. As regards the last two species, much confusion has long existed, in two respects. Firstly, as to their distribution; both easily run wild, and having been for a long time in cultivation throughout the greater part of Europe, they have often been recorded as native, where they are only naturalised. I suspect that all the records from central Europe—Germany, Switzerland, Austria—belong to this category (though Austrian botanists consider *S. umbrosa* native in ravines near Ternberg); certainly the records from England, Scotland and northern Ireland are inadmissible. Secondly, all three species are variable, and, moreover, *S. umbrosa* and *S. Geum* hybridise freely where they grow together. Quite a number of these varieties or hybrids

shall endeavour to unravel the London Pride tangle, with the assistance of the Irish evidence. It should be mentioned that in this group floral characters are of little service for diagnosis; the leaves are the important feature. In *S. umbrosa* the flowering stem is stouter, taller, and redder than in *S. Geum*, and the inflorescence and flowers larger; and the same thing applies to *S. Geum*, as compared with *S. cuneifolia*; but these and other floral characters are chiefly relative, and we have to turn to the leaves for the more important distinguishing characteristics.

First of all we have typical *S. Geum*, a slender plant of shady places, ranging in south-west Ireland from sea level to 3,000ft. The leaf blade is approximately circular in outline, heart-shaped at the base, hairy on both sides; the leaf margin is crenate (*i.e.*, the teeth are rounded), the leaf stalk is several times longer than the blade, slender, almost round in section, very hairy (Fig. 1, A). This is the typical Pyrenean and Irish form, and it is common in gardens. It is *S. Geum* sub-species *eugeum* var. *Lapeyrousii* of Engler and Irmscher's monograph. All the departures from this type tend towards *umbrosa*, and most, if not all, of them are hybrids. In spite of the many described "varieties," I believe that *S. Geum* (though classed as a "typus polymorphus" by Engler and Irmscher), is much less variable as a species than *S. umbrosa*. The only variations of any consequence that I have seen, which may not be due to *umbrosa* blood, have reference to size (there are some very

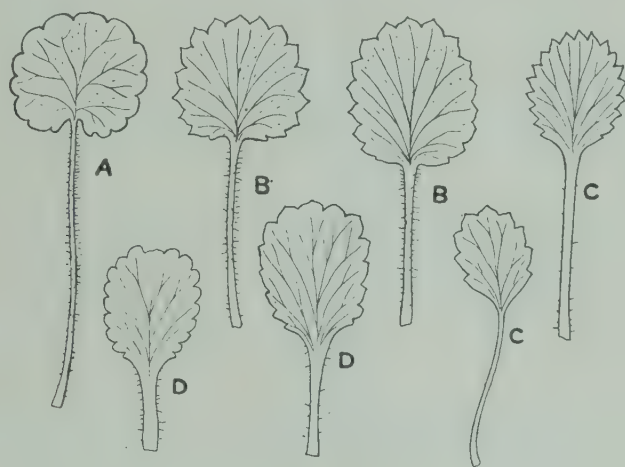


FIG. 1.  
Half natural size.

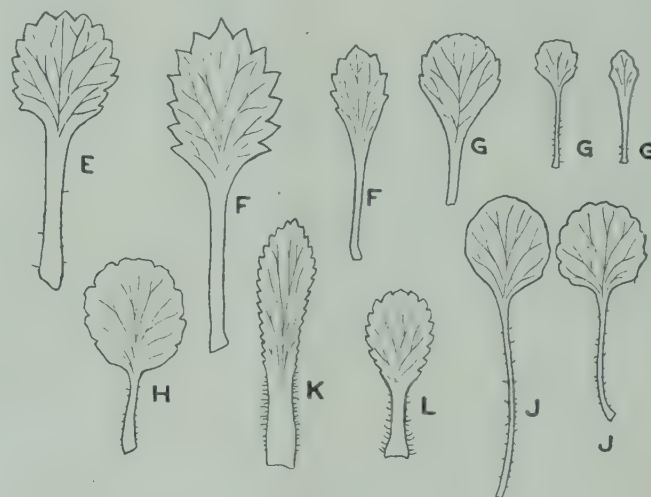


FIG. 2.  
Half natural size.

have, at different times, been described as species—for instance, *SS. dentata*, *crenata*, *modesta*, *hirsuta*, *Donii*, *sphæroidea*, *polita*, *elegans*, *gracilis*, *serrata*, *serratifolia*, *spathularis*. There are, in addition, a number of garden varietal names, mostly of little value, many of which will be found mentioned in Farrer's "English Rock Garden."

Since two of the species occupy regions remote from most European botanists, it is not a matter of surprise that the majority of the botanical books make rather a hash of this difficult group; but one might have hoped that in the great monograph on *Saxifraga*, by Engler and Irmscher, published in the *Pflanzenreich* series in 1919, we should have had all this confusion swept away, and a clear account given of the species and their complicated offspring. That is, however, still a desideratum. The authors named divide *S. Geum* into two sub-species, eleven varieties, and five forms, and *S. umbrosa* into three varieties and four forms; plants known only in gardens being included. But a large number of these variants are, without question, hybrids, and others are not more distinct—sometimes less so—than other varieties, both wild and cultivated, which are not mentioned—for instance, the dainty *primuloides* form of *S. umbrosa*, the loveliest of all the London Prides. If one goes, say, to County Kerry, where *umbrosa* and *Geum* grow abundantly, one receives an education in this group that is most enlightening. I have had no opportunity of studying the plants in the Pyrenees, where, likewise, they consort, though I have seen a good many Pyrenean specimens. There is little doubt that one's experiences there would be similar. I

strong forms in gardens), toothing (broadly crenate to crenate-serrate), and colour (dark green to yellowish on face, green to crimson on back).

In the first departures from type *Geum* towards *umbrosa*, represented by *S. dentata* of Haworth and *S. Geum* var. *argute-serrata* of Engler and Irmscher, the cordate leaf base goes, the leaf edges meeting the stalk at about a right angle, and the teeth tend to become sharp (Fig. 1, B, B). Following on these, we get a long series of forms which have been grouped under *S. hirsuta* of Linnaeus, and which are responsible for many of the specific and varietal names which cumber the group. All are intermediate between *Geum* and *umbrosa*, but the mixture of characters varies greatly in regard to shape of leaf and of teeth, hairiness, and so on. That these are hybrids is evident from even a cursory study of the plants on their native ground, and has been proved by the experiments of Professor H. H. Dixon, as described in R. W. Scully's "Flora of County Kerry" (1916). Professor Dixon produced a full series of them synthetically by crossing the two species. One can see the same thing occurring in nature at places like Connor Hill Pass in Kerry, where the two species and all kinds of intermediates grow together on rocks by the roadside. A couple of these Kerry hybrids are illustrated (Fig. 1, C, C), but a black-and-white sketch cannot show the intermediate character of the colour, texture, etc., of the leaves, which is very striking. It is unfortunate that Professor Dixon's experiments and Dr. Scully's observations, which are so fully set forth in the "Flora of County Kerry," should not have come under the notice of the authors



of the Pflanzenreich monograph, though published two years before the appearance of the latter.

We now arrive at *S. umbrosa*, the London Pride, distinguished by its more or less obovate leaf blade (egg-shaped, with the broad end up), without hairs and tapering at the base into a foot stalk, which is stout, flat on face, often hairless and typically no longer than the blade (Fig. 1, D, D). Here an interesting point comes in. As a native, the species is confined (as I take it) to the Peninsula and Ireland, but, unlike *S. Geum*, the Irish form is not the same as the Pyrenean. In the latter the leaf blade is rather oval, being comparatively broad below, the leaf margin is crenate, or at least not *sharply* serrate, and the foot stalk seldom longer and often shorter than the blade. This Pyrenean plant is the one which Linnæus named *umbrosa*, so it stands as the type. It is the common form of gardens. The Irish plant, which appears to occur also in Portugal, has leaves narrower below and more wedge-shaped, with sharp teeth, and a stalk mostly longer than the blade (Fig. 2, E). It is the *S. serratifolia* of Mackay, *S. serrata* of Sternberg, and should be known as *S. umbrosa* var. *serratifolia*. It is widely spread along the south and west of Ireland, from sea level to the tops of the mountains, and has recently been found at 2,000 ft. in Wicklow. Specially sharp-toothed forms of it are often seen in gardens, under a variety of names.

Most of the variants of pure *umbrosa* are developments in the direction of and beyond *serratifolia*, and away from *S. Geum*—the leaves more sharply toothed, the blade smaller or narrower or more wedge-shaped. I illustrate (Fig. 2, F, F) a couple of plants collected in Ireland to exemplify the range of variation.

Regarding the third species of the group, the well known *S. cuneifolia*, little need be said. Although the plant varies much in size, the leaf blade from almost circular to narrowly wedged-shaped in different forms (Fig. 2, G, G, G), and its margin from smooth to toothed, the plant is easily known by its small size, dark green colour, absence of hairs, and slender flower stems, only half the height of those of the other species. A hybrid with *umbrosa* is reported from Berlin, and I illustrate (Fig. 2, H) what seems to be the same thing from my own garden. Other garden forms are much larger than the type, with a very round leaf blade and very long leaf stalk (Fig. 2, J, J). I am inclined to suspect that there is some *Geum* blood in these; they are not referred to in the alpine and Pyrenean floras, which is suspicious, and the size and shape of the leaves are suggestive of *Geum*.

Finally, a number of hybrids are known between members of the *Robertsonia* group and other saxifrages. These include ? *crustata* × *cuneifolia* (pseudo-*Forsteri* Sündermann), *Aizoon* × *cuneifolia* (*Zimmereri* Kerner), *Cotyledon* × *cuneifolia* (*Jäggiana* Brügger), *Taygetea* × *cuneifolia* (*tazetta* hort.), *Aizoon* × *Geum* sub-species *hirsuta* (*Andrewsii* Harvey = *Guthrieana* hort., and *Wildeana* Kunze), *Geum* × *rotundifolia* (*hybrida* Vill.). Of these the best known is *Andrewsii* (Fig. 2, K), a delightful plant, erroneously stated to have been found in

Ireland. I follow Engler and Irmscher in setting this down as identical with *Guthrieana*, but as I recollect the latter in British gardens (I have not access to it at present), it is different, though evidently of allied parentage. The reference of *Andrewsii* to *Aizoon* × *hirsuta* (taken also from Engler and Irmscher) would make it a three-parent hybrid—*Aizoon* × *umbrosa* × *Geum*. It would seem more probable that it is *Aizoon* × *umbrosa*. There is another hybrid of this group which I had from Glasnevin, with a much broader leaf blade and more distinct foot stalk (Fig. 2, L). I do not know that it has a name. Like *Andrewsii*, it has the little marginal white, cartilaginous covering to the teeth which characterise the section *Euaizoonia*, to which *S. Aizoon* and its allies belong.

For garden purposes we may sum up the whole of this complicated group as follows:

1.—*S. GEUM*.—With round, hairy, long-stalked leaves, heart-shaped at the base and crenate on the margins. Leaf-stalk round and slender.

2.—*S. UMBROSA* TYPE.—The common garden London Pride, with oval or obovate, smooth, short-stalked leaves, wedge-shaped at the base, and crenate or crenate-serrate on the margins. Leaf stalk broad, flat on face.

3.—*S. UMBROSA* VAR. *SERRATIFOLIA*.—Differing from the last in its more sharply-toothed, more wedge-shaped leaves, with longer stalks.

4.—A crowd of hybrid forms, intermediate between No. 1 on the one hand and Nos. 2 and 3 on the other, many of them handsome plants but hardly worthy of names, as all intermediates exist.

5.—A few distinct varieties of *umbrosa* which deserve a place in the garden, like var. *primuloides* hort., and var. *crenata* hort. The former should be in every rock garden. There are also variegated sports for those who care for such things—one silver and pink, another with gold blotches, both inclined to revert to type.

6.—*S. CUNEIFOLIA*.—Small, dainty, dark green, without hairs; a pleasing rock plant in its various forms.

7.—Hybrids between the *Robertsonia* species and species of saxifrage of other sections; of these *S. Andrewsii* is the most important for garden purposes.

The readiness with which the species of the *Robertsonia* group, and *S. umbrosa* in particular, accommodate themselves to all kinds of garden conditions, has put them among the most widely grown of all rock plants, but has, at the same time, tended to blind us to their beauty. The London Pride is one of the handsomest of all saxifrages, both in leaf and flower, and if only it were rare or "miffy," with what pride would we point to a well grown plant in the rock garden!

I have to thank Miss Eileen Barnes for the figures. While they illustrate excellently the critical leaf characters, according to which diagnosis must be made, it would need a drawing of the whole rosette to give an adequate idea of the appearance of each form; and even then we should lack the details of colour and texture, which are often very characteristic.

## GARDENS OF HEALING.—IV

HEALTH gardens can be of two kinds, those of the amateur who grows the beneficent plants for simple family medicines and for the interest and knowledge which their cultivation gives—and those of the professional, who cultivates them to dry and sell. The latter should reserve as large a piece of ground as possible for the poisonous plants, which are in great demand. These are easy of culture and include *Belladonna*, *Atropa*, *Datura*, *Stramonium*, *Aconitum*, *Napellus*, *Colchicum*, *autumnale*, *Chelidonium*, *majus*, *Digitalis*, *purpurea*, *Solanum*, *Dulcamara*, *Helleborus*, *niger*, *Solanum*, *nigrum*, *Scilla*, *maritima* and *Ruta*, *graveolens*.

A large red label should mark the poison section of the health garden and every separate plot should have a smaller, but conspicuous red label bearing the word "Poison" as well as the name of the plant.

For the amateur's garden of healing it is as well to dispense with the poisonous plants, whose properties can, of course, only be made available by accredited professional people. The following well known herbs have healing, nourishing and tonic properties: colza, chervil, caraway, coriander, tarragon, fennel, rosemary and marjoram.

Flax (*linum*), the healing properties of whose seeds are so well known on account of the soothing oil which they contain; mustard (*Sinapis nigra*), constantly used in poultices for chest complaints and chills and also as an anti-poison; and saffron crocus, whose stigmas are so stimulating and nourishing, are three useful plants for the health garden. From the last named plant an infusion is made, either with a handful of stigmas or a tablespoonful of the crushed corms, which is an excellent tonic in cases of

debility and loss of appetite, or for the depression which so often follows influenza.

Herb Robert and millet are two other interesting plants which are of service to mankind. The former is astringent and an infusion of the whole plant is an excellent gargle for ulcerated and inflamed throats and also as a lotion for healing sores and wounds. Bread made from millet flour is delicious as well as exceedingly nutritious and is used in cases of dysentery. An infusion of millet seed is an excellent drink for inducing eruption of the rash in cases of measles and scarlet fever. For deafness and to cure buzzings in the head, a simple cure is to fill little bags with equal parts of crushed millet seeds and common salt and to place them on the ears. The same relieves heavy and aching heads.

VICTORIA SLADE.



# RHODODENDRONS IN NORTHUMBRIA

THE dwarf rhododendrons on the rockery here have mostly done well this spring. Some of the little ones of the *R. fastigiatum* group have been wonderful masses of colour, but all too fleeting owing to the hot weather, though at any time the flowers of these are only short lived. Larger growers, like *R. ciliatum*, having escaped all damage by frost, except for a few buds which were of no account, have made a fine display.

Most of the dwarf rhododendrons are planted in an open situation in soil largely composed of leaf-mould, with a small admixture of heavy loam. Probably such a soil is better than pure peat, and the small quantity of clay is good as a moisture holder. Taking the more interesting species in alphabetical order

*R. CALOSTROTUM* continues to do very well, and though not flowering so freely this spring as last, is growing vigorously. It shows a tendency to increase more in width than height. At all times it is a neat, low-growing little bush, but when in bloom it is a great beauty, with its large, bright pink flowers held well above the blue grey foliage.

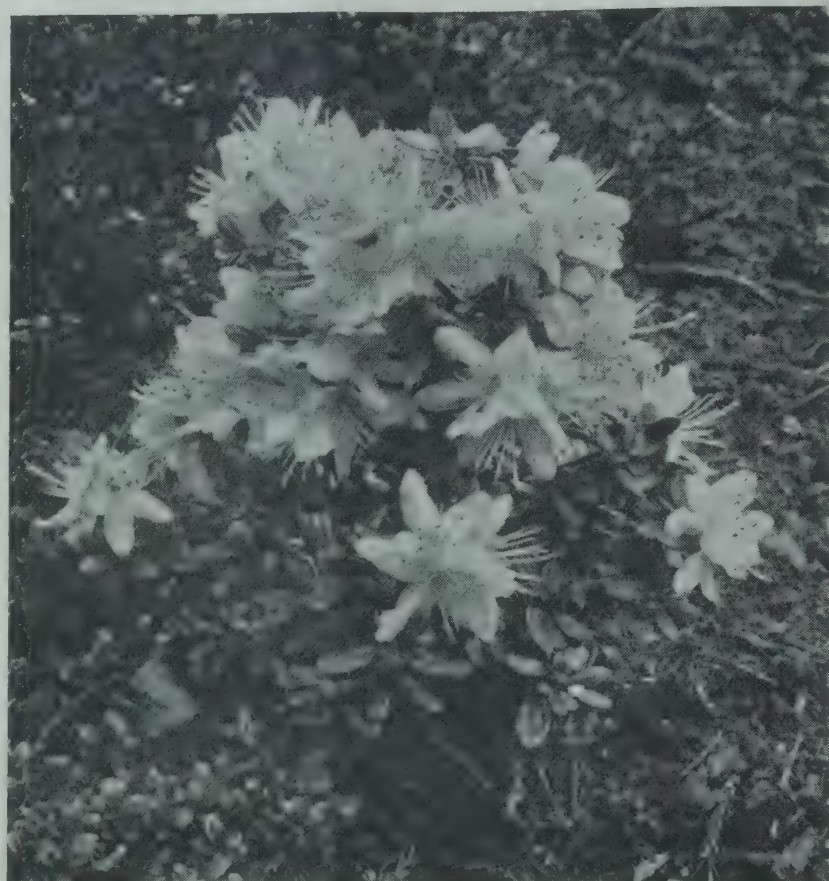
*R. CHAMÆCISTUS*, correctly *RHODOTHAMNUS CHAMÆCISTUS*.—Although this species has the reputation of being rather fickle, a plant put in about two years ago is doing very well. As this species is found in the Eastern Alps on a limestone formation, at the time of planting an old bone was inserted in the hole, and, whether thanks to the old bone or not, it is flowering with great freedom this spring. The flowers are flesh pink with darker markings towards the centre and they are very lovely.

*R. CHRYSÆUM* looks healthy, and though its pale yellow flowers have not yet been produced as freely as in the case of *primulinum*, it promises in time to make an attractive little bush.

*R. CILIATUM* cannot always be called a dwarf rhododendron, but if grown in an open situation after reaching about one foot in height, it will spread out into a flat-topped bush, and increase in height very slowly. Unfortunately, its flowers and buds are easily damaged by frost, and as it is an April bloomer, it is almost useless where spring frosts are prevalent.



WITH CAREFUL ATTENTION *R. RUBIGINOSUM* FORMS A HANDSOME AND SHAPELY BUSH.



*RHODODENDRON IMPEDITUM* WHEN GROWN AS A BUSH REACHES A FAIR HEIGHT.

Here it gets caught about every other year. When it does escape all damage its large white, pink-flushed flowers, as fine as any greenhouse azalea, make ample compensation for previous disappointments.

*R. DICHROANTHUM*.—A plant put in last autumn is growing satisfactorily. It may eventually be too big for a small rockery, but could not be left out.

*R. FASTIGIATUM* is one of the best of the low-growing kinds, and forms a wide mat of silvery blue-green foliage, which is attractive all the year round, and in April-May is covered with a profusion of lilac or lavender-blue flowers. It is very accommodating and easy to please, and small rooted cuttings quickly form nice little bushes.

*R. HIPPOPHÆOIDES* is another good purplish-blue of an erect habit of growth. It has an advantage over *fastigiatum* in that its flowers last fresh for a longer time.

*R. IMPEDITUM* forms a neat, compact little bush, with glossy dark green leaves and lavender or purple flowers with conspicuous stamens like *fastigiatum* and *scintillans*. It seems to be quite easy to grow.

*R. INTRICATUM* is also a good mauve or lilac sort that is especially valuable on account of its blooming after most of the others are over.

*R. LEDOIDES* might be called the daphne-flowered rhododendron. Its pink flowers at their best are very beautiful and last well, but it is not so easy to grow as most of the others. Here, its chief requirements seem to be at least half shade and a moist, but well drained mixture of leaf-mould or loam.

*R. MOUPINENSE* has grown quite well, but has not yet succeeded in producing its February flowers. Perhaps it will be able to do so some year if we get a sufficiently long spell of mild weather, or a winter hard enough to keep it back till spring.

*R. MYRTILLOIDES* is too young yet for one to say more than that its small glossy dark green leaves, white underneath, look attractive, and that it is growing well.

*R. PRIMULINUM* is one of the indispensables in any collection, however small. It is a pity its pale yellow flowers are individually so short lived, but they are produced in such quantities that a bush in full bloom is a fine sight.



*R. RACEMOSUM* is very accommodating, and is rightly now a favourite. As it flowers all up the previous year's shoots it looks better as a vigorous young plant making long annual growths than after it gets older.

*R. RUBIGINOSUM* if left alone may eventually get far too big for almost any rockery, but it flowers so freely in a young state, and springs so readily from the base if cut back, that it may with advantage be included. Although the individual flowers are not large, they are of a bright and attractive pink, and produced in clusters containing as many as twenty-five single flowers at the ends of the strong shoots. As its bark seems liable to split near the ground in very severe winters, perhaps it will never become very large, unless in the west or near the sea.

*R. SCINTILLANS* has given no trouble here. It has a loose habit of growth, and its lavender blue flowers are freely borne and last well.



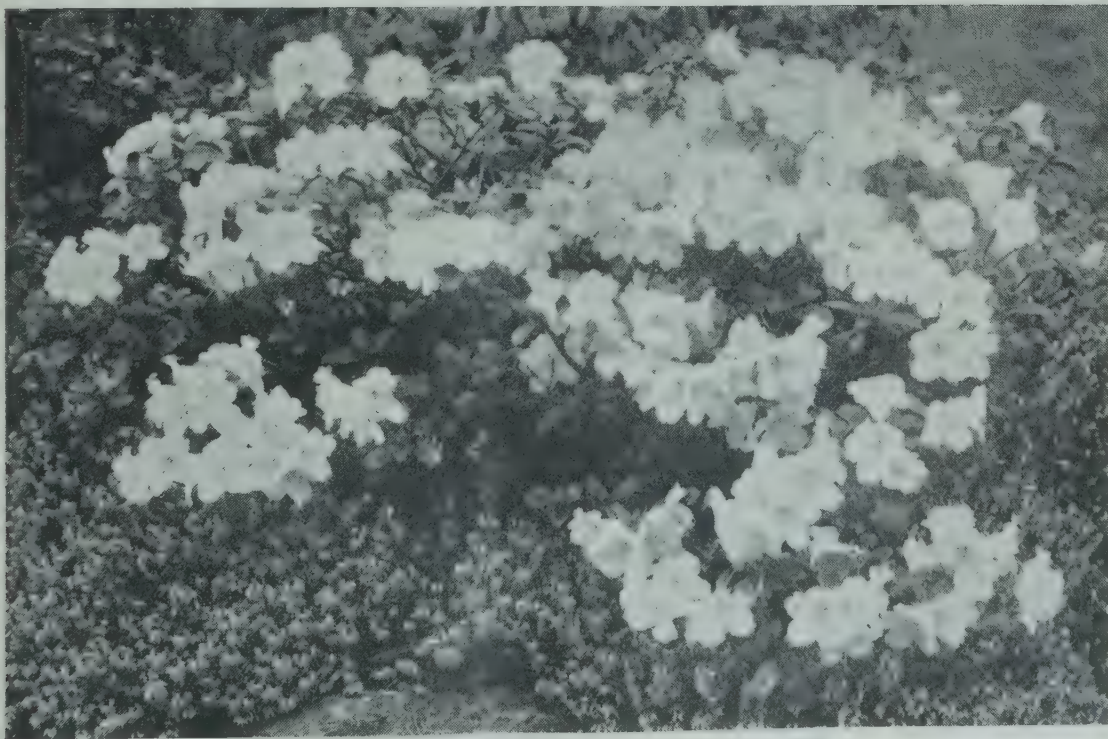
*RHODODENDRON FASTIGIATUM*, ONE OF THE MOST ATTRACTIVE OF THE DWARF SPECIES WITH ITS SILVERY GREEN FOLIAGE AND LILAC BLOSSOMS.



*RHODODENDRON CALOSTROTUM*, OF NEAT AND COMPACT HABIT AND CARRYING LARGE BRIGHT PINK FLOWERS.



ONE OF THE LIME LOVING SPECIES, *RHODODENDRON* OR *RHODOTHAMNUS CHAMÆCISTUS*.



*RHODODENDRON CILIATUM* IN COMPANY WITH *ERICA CARNEA* WHICH ACTS AS A MEASURE OF PROTECTION AGAINST SPRING FROSTS.

*R. WILLIAMSIANUM* demands shade and moisture, and a well drained soil largely composed of leaf-mould. Here it has not yet flowered. If it gets too much sun, or the soil is badly drained, it seems liable to die off suddenly, but its leaves are so distinct and its flowers so fine, that it is well worth a little extra trouble.

Anyone living in a limestone district who would like to try these dwarf rhododendrons, would find a foot of lime-free soil laid down on top of their limy soil to be ample, and provided there was no higher limy soil in the near vicinity, the new soil should keep quite sufficiently lime-free to give just as good results as can be got anywhere. Of course, limestone stones would have to be avoided for such a bed, and a guard kept against using very hard water for watering in dry weather.

In conclusion, I would recommend all rhododendron lovers to read "*Rhododendrons for Amateurs*." This book contains much useful information regarding the culture of the species I have mentioned.

R. B. COOKE.



# DELPHINIUMS AT VINCENT SQUARE

**Q**UITE a feast of colour met the eye on entering the Royal Horticultural Society's Hall on the occasion of the ordinary fortnightly show on June 23rd and 24th. The delphiniums were undoubtedly the principal feature of the show and provided a splash of colour that is all too rarely seen at the Hall. Blue and shades of blue to be truly appreciated require the sun's rays to supply a warm tone to the colourings and, naturally, are seen to best advantage in the garden itself. But, nevertheless, the effects *en masse* was magnificent, and if one's glance took in the brighter tints of the sweet peas and the roses, then the picture was both complete and wonderful.

Both Messrs. Blackmore and Langdon and Mr. T. Bones had outstanding exhibits. In each case the size and form of the flowers and general arrangement on the spike were perfect. The flowers were evenly placed—not in the least overcrowded nor yet thin—and the spikes beautifully tapering. The Shah was a variety of unique colouring and great height. The semi-double flowers are deep rosy-lavender. Mrs. Townley Parker was also noticeable. It is one of the best pure blue singles. The huge spikes of Mrs. A. J. Watson (deep mauve), and Robert Cox (rich blue and rosy-lilac), towered above the rest. Edward Bromet, a variety of purplish blue with a white eye; Millicent Blackmore, with blue and mauve flowers symmetrically placed on long tapering spikes; and Marjorie Ferguson, a beautiful sky-blue and mauve, were all much admired. Walter T. Ware, Purple King, Mrs. Shirley, Mrs. Christie Miller, Sir Douglas Haig and Pannonia were also seen on the stand of Messrs. Blackmore and Langdon.

Mr. T. Bone is to be congratulated on the excellence of his delphiniums. Luxor was the most striking variety. The tall and stately spikes with their semi-double flowers of rich blue and purple stood out from among the rest. A variety of great strength and vigour was The Rev. Charles Storr. It has large semi-double flowers of bright blue suffused with rosy-mauve. Miss Winifred B. Mackintosh was a delightful colour, being soft blue suffused with mauve and having a conspicuous white eye. Other good varieties were Mrs. H. Kaye, Dusky Monarch, Rev. E. Lascelles, The Alake, Elsa and Mrs. T. G. Baker.

Some fine delphiniums were staged by Messrs. Waterers and Mr. T. Carlile. Among Messrs. Waterers' exhibit were the varieties Blue Bird, Daphne, Harry Smetham, Walter T. Ware, Elsa, Mrs. Creighton, Mde. Violet Geslin and King of Delphiniums. Blue Bird is an intense blue, and about the nearest to a true blue self. It is one of the earliest to bloom and has graceful, tapering spikes.

Among the delphiniums exhibited by Mr. T. Carlile were Norah Ferguson, Blue Lagoon, Mrs. A. C. Kendrick and Mrs. Victor Hewlett. Barbara, Phyllis Charrington, Lovely, Barbara Thomas and Pannonia were also seen. Norah Ferguson, a delphinium which has received much attention, is semi-double, with flowers of a beautiful shade of pale blue blended with soft pink.

Messrs. Bunyard had a large ground exhibit of delphiniums. Such varieties as Medea, Empress Queen, Guardsman, Walter T. Ware, The Alake, Lavender, Mrs. Creighton, Robert Cox, Lizzie Van Veen and Minerva had been selected to fill the large oval bed. The group was most effective. Messrs. R. H. Bath were exhibiting peonies and delphiniums. The latter formed a pleasing contrast with the pinks and reds of the peonies. Perfection, a tall light blue variety; Dusky Monarch, a light purple with a striking black centre; Splendour, a pale sky blue

and mauve; James Kelway, Ladye Faire and Ida R. Elliott were shown by this firm.

Messrs. Kelway and Son also exhibited delphiniums, together with their famous peonies. The branching habit of the varieties shown by them was particularly noticeable. Jewel of the West, Thunder Cloud, Lloyd George, Smoke of War, Bluebeard and Sir Alfred Keogh, were a few of the best. Lloyd George is a bright blue and violet delphinium with a white eye and large flowers.

A small but striking exhibit, staged by Mr. J. Burrell, was formed of one variety of delphinium alone. It is known as Mrs. W. J. Sanderson and is of a brilliant blue, with a conspicuous white eye. The spikes are of medium size and the flowers evenly placed thereon. For the herbaceous border this will be a most useful and effective variety.

Messrs. Lowe and Gibson had some exceedingly beautiful delphiniums. These, all raised from seed, were exhibited to show what good flowers in a great variety of colours can be obtained by such a method of propagation.

Several firms staged very good exhibits of roses. Some of the specimens shown by Messrs. Alex. Dickson and Sons were perfect and very fragrant and the whole exhibit was well arranged. A truly wonderful colour is Scarlet Glory, a vermilion scarlet hybrid tea, with flowers of good form and abundant dark green foliage. Fred. J. Harrison was another beautiful rose with cardinal red petals shaded blackish crimson towards the outer edge. Saltaire, Sunstar and Ethel Somerset were very effective. Some good varieties could be seen on the stand of Messrs. Benjamin R. Cant and Sons, and among them Lady Roundway, a deep coppery chrome; C. V. Haworth and Sovereign, with its deep golden yellow flowers and well shaped buds, were noticed.

Several new hybrid tea roses were shown by Messrs. Chaplin Bros., one, Mrs. Herbert Nash, received an award of merit. Two others were Lady Sydney Eardley Wilmot, a coppery salmon novelty, and Eric Holroyd, a brilliant red, shaded gold at the base. Messrs. Samuel McGredy and Son had chosen among many others, Diadem, Lord Charlemont, Vesuvius and Mrs. Henry Morse for their exhibit. Mr. George Lilley had two good hybrid teas, one being Marcia Stanhope, a sweetly scented white rose, and the other Lady Constable, a bright salmon pink. Mr. J. H. Pemberton staged many varieties of roses, some of them of his own raising. Anne, I. Zingari, The Adjutant and Aurora were a few of those introduced by this specialist.

There are few garden lovers who can fail to appreciate the genus *campanula* in all its many forms and varieties and which lends itself to such an infinite variety of situations in the garden. The so-called Canterbury Bells rank among the finest of our herbaceous flowers, and it is only on an occasion such as this, when Messrs. Ladhams of The Shirley Nurseries, staged a number of fine varieties, that one has a chance to pay one's respects to the genus. One of the most notable varieties was Everest, carrying large bells of that delicate pale shade of blue always associated with the flower. Another was Faerie Queene, of a still more translucent tone, with wide open bells sitting more squat on the stem. With this variety a fine contrast is obtained between the creamy spreading stigmas and the blue of the corolla. Snowdrift and Snow Queen are both pure white varieties, with well shaped bells, while Queen of June is another of the blue sorts with large, rather spreading flowers, which tend to lose their bell shape. Two semi-double forms of interest were Shirley, with

well shaped blue flowers carried on long stems, and The King, of a much deeper shade, almost running to mauve.

One of the finest flowers we have for summer decoration in the garden is undoubtedly the sweet pea, with its wealth of colour and flowering propensities. Both Messrs. Dobbies and Messrs. Sutton's stands were magnificent. On the former such varieties as Powerscourt, Mermaid, Mrs. Tom Jones, which to our minds still remains as the best blue variety we have; Grenadier, with large flowers of a geranium colour; Dobbie's Cream and Magnet, of a delicate cream pink shade were noticed. Messrs. Sutton's staged quite a number of the same varieties, with, in addition, old sorts, such as Majestic Cream, Mammoth and The President Harding. Among the newer kinds, although it seems invidious to single out any we noted Pimpernel, of a vivid scarlet, and Miss California, of a shade of rich salmon cream pink on both stands.

Very few alpiners were shown, but F. G. Wood of Ashted made a decorative exhibit with masses of orange and copper mimulus, grouped at the foot of a Japanese maple and spikes of *Primula littoniana*, against a dark background of dwarf conifers. The exhibit included *Dracocephalum Isabellæ*, a recent introduction from western China, *Gentiana decumbens alba* and *Oenothera mexicana*, with almost stemless flowers of vivid pink.

Messrs. Waterer showed *Codonopsis ovata*, pale blue bells decorated within by geometric designs in orange, purple and black; *Gentiana macrophylla*, a dull, cluster-head gentian; the strange and brilliant *Sedum sempervivum*, looking at present like a pile of terra cotta tiles, but surmounted by a fat bud that will presently break into a spray of blood-red flowers; *Convolvulus Cneorum* and *Campanula turbinata pallida*, with its relatively enormous flowers of greyish blue.

Among other exhibits were the following:

**Alpines.**—Messrs. Bakers, Ernest Dixon, R. Tucker.

**Carnations.**—Messrs. Allwood Brothers, C. Engelmann, Lowe and Gibson and Stuart Low and Co.

**Greenhouse Plants.**—Messrs. L. R. Russell and Co., and Stuart Low and Co.

**Hardy Plants.**—Messrs. J. C. Allgrove, Barrs, T. Carlile, Chalk Hill Nurseries, Godfrey and Son, K. and E. Hopkins, Harkness and Sons, M. Prichard and F. G. Wood.

**Iris.**—Messrs. Barrs and M. Prichard.

**Orchids.**—Messrs. Sanders and Stuart Low and Co.

**Strawberries.**—Messrs. Laxton Bros., and J. A. Mix.

**Shrubs.**—Mr. Charles Turner.

**St. Brigid Anemones.**—Messrs. Reamsbottom and Co.

## NEW AND RARE PLANTS.

### AWARDS OF MERIT.

**PHLOMIS FRUTICOSA.**—This interesting shrubby member of the Labiatae has long been cultivated in this country, and it is passing strange that it has not obtained an award previously. It is an interesting evergreen shrub, bearing dull green wrinkled leaves like the common sage, with, in addition, numerous stalkless, bright yellow flowers, characteristic of the family. Shown by the Director of the Botanic Gardens, Cambridge.

**OZOTHAMNUS ROSMARINIFOLIUS.**—This well known shrub, popularly called "Snow in Summer," was represented by a well grown pot plant and long flowering sprays. It is a characteristic dark evergreen shrub with small smooth leaves closely arranged on the branches and clusters of quite small, pure white flower heads. It thrives excellently under the protection of a wall. Shown by



Sir William Lawrence, Dorking, and Mr. Allgrove, The Nurseries, Slough.

**DEUTZIA SCABRA LATIFOLIA.** This is a variety of the ordinary type species. It carries rather loose panicles of pure white flowers with rather spreading petals. The leaves are ovate in shape and produce a good contrasting effect with the blossoms. Shown by the Hon. Vicary Gibbs, Aldenham.

**ROSE DAME EDITH HELEN.**—This was a fine hybrid tea variety bearing large, shapely blooms of a fine shade of pink, carried on stiff wiry stems. The foliage was of good colour and provided an excellent setting for the flowers. Shown by Messrs. Alex. Dickson, Limited, Manchester.

**ROSE MARCIA STANHOPE.**—Another handsome hybrid tea variety, bearing fine pure white blooms of a rather long, oval shape in the bud. The petals are of good substance, while the foliage is of excellent texture. Shown by Mr. G. Lilley, Slough.

**ROSE LADY WORTHINGTON EVANS.**—This is one of the finest crimson-red hybrid tea varieties we have seen. The individual flowers are of good shape and form, and the overlapping petals are of good substance, being covered with purplish bloom. The dark green, glossy leaves set the flowers off to advantage. Shown by Messrs. Alex. Dickson.

**ROSE MRS. HERBERT NASH.**—An excellent, sweetly scented hybrid tea variety with large handsome blooms of a deep crimson colour. Shown by Messrs. Chaplin Brothers.

**ROSE ELSE POULSEN.**—This is a very fine, large, single polyantha variety, with flowers composed of beautifully frilled petals of a delicate salmon pink shade. The foliage was of a hue of glossy green with a tinge of bronze which becomes so pronounced in the autumn. The plant appears to be an excellent doer, judging from the number of buds on the sprays shown. It is certainly a variety

which ought to become popular in the future. Shown by Messrs. Prior, Colchester.

**CAMPANULA PERSICIFOLIA GIGANTEA CORONATA SHIRLEY.**—A rather fine semi-double form, carrying bells of a shade of delicate porcelain blue. The individual flowers are almost 1½ ins. across, and looked well drooping from the tall stems. Shown by Messrs. B. Ladhams, Limited.

**CALCEOLARIA PRATENSIS.**—This is a small pale yellow flowered form which appears to be admirably suited to pot culture. The flowers are borne gracefully in loose clusters on stems which reach about 1-1½ ft. high. The leaves are mostly basal and slightly ovate lanceolate. Shown by Sir William Lawrence, Bt., Dorking.

**TITHONIA SPECIOSA.**—This is a shrubby, half-hardy annual from Mexico, belonging to the composite family. The large, almost



THE HANDSOME FRILLED BLOSSOMS OF ROSE ELSE POULSEN.

striking and about 3 ins. in diameter, with their cushion of yellow stamens in the centre. The leaves are more or less three-lobed and somewhat heart-shaped. Shown by Mr. J. B. Body, Hindhead Court, Hindhead.

**ACIDANTHERA CANDIDA.**—This is a slender and more or less erect leafy member of the iris family. The pure white flowers are borne on lax spikes and look exceedingly graceful, their appearance being enhanced by the long linear leaves. The flowers are very sweetly scented. Shown by Mr. W. Van de Weyer, Clyffe House, Dorchester.

**HEMEROCALLIS WINSOME.**—This is a rather dull pale yellow-flowered variety of the day lily. The petals are rather spreading and somewhat reflexed in the open flowers, which are well borne on long scapes. Shown by Mr. G. Yeld, Gerrard's Cross.

**DIANTHUS GIANT-FLOWERED FRILLED.**—A pot of these frilled varieties of all shades, from white to pink and scarlet, was shown. Some

of the flowers were exceedingly graceful and attractive, while with others the colour did not appeal to us. Shown by Messrs. James Carter and Co., Raynes Park.

**CLEMATIS QUINQUEFOLIOLATA.**—This is a very attractive species from Central China, allied to *C. Meyeniana*. The leaflets are lanceolate, while numerous white flowers, about ½ in. to ¾ in. across, are borne in clusters or cymes. Shown by Mr. E. M. Preston, The Warren, Hayes, Kent.

#### ORCHIDS.

**LÆLIO-CATTLEYA BEATRICE DE HERRIARD** (*C. Veiris* × *L.-C. Ettrick*).—A fine addition to the yellow section, the flower shows much of the characters of *C. Veiris*, a garden-raised hybrid composed of the two species *C. bicolor* and *C. aurea*. Award of merit. Shown by Mrs. Beatrice Jervoise, Herriard Park, Basingstoke.

**ODONTOGLOSSUM LADY COLMAN** (*Lambeauium* × "V.C.").—This promising seedling bore a single flower of large size and massive formation, of slight rose tint, the segments heavily blotched with dark crimson, the roundly formed labellum white, with a crimson blotch in the centre, and a bright yellow crest. Preliminary commendation. Shown by Sir Jeremiah Colman, Bt., Gatton Park, Surrey (gardener, Mr. Collier).

**ODONTOGLOSSUM LADY HOLMDEN** (*Lord Pirrie* × *Amethyst*).—This young seedling carried but one flower, having the segments broadly formed and almost covered with dark purplish blotching, the elongated labellum crimson-purple, except for the white apex. Preliminary commendation. Shown by Sir Jeremiah Colman, Bt.

**ODONTOGLOSSUM EXIMIUM VAR. GATTON TRIUMPH** (*crispum solum* × *ardentissimum* var. *J. Gurney Fowler*).—An interesting result, and the only seedling out of thirty so far flowered in this batch which inherits the peculiar crimson-coloured labellum of *crispum solum*. There is an occasional circular blotch of crimson on the other segments. Preliminary commendation. Shown by Sir Jeremiah Colman, Bt.



CALCEOLARIA PRATENSIS OF GRACEFUL HABIT.



# CORRESPONDENCE

## PRIMULA PULVERULENTA BARTLEY STRAIN.

SIR,—Judging by the show reports and the amount of correspondence I have had about these primulas, there seems to be a good deal of misunderstanding about them. I will, therefore, explain what they are. They are *not* hybrids, but pure pulverulenta all through; nor are they the variety Mrs. R. V. Berkeley. This variety—Mrs. Berkeley—was a sterile sport which originated in the Coombe Wood Nursery of the late firm of Veitch. Being sterile, it would not set seed, and therefore could not be raised from seed. As it was such a beautiful plant, I started some years ago to try to obtain a fertile form that would reproduce itself from seed. After several years' work, I got a strain that gave a fairly good percentage of pink forms which has now become a 100 per cent. strain. In this strain there are four or five different pink forms, all good enough to keep, and this year I have about 12,000 plants, out of which I have found only five reverting to the type—i.e., the purplish crimson flower—so that there is now no question about its reproducing pink. As the various forms appeared to be more attractive in a mass mixed together, I have never troubled to isolate and grow each one separately, and as the bumble bees cross the flowers of the various shades, so the seed from any one form will reproduce all or any of the various shades. No doubt by isolation any particular form could be reproduced exactly from seed. The plant is easily grown, and is of very good constitution, and thrives in a cool moist shady place where it does not get waterlogged.

It has been suggested to me by several people that I should use some name by which the strain can be identified. I have, therefore, decided to use the name above, which describes the various shades as a whole.

The following forms have been named: Lady Thursby, A.M., R.H.S., 1924, rose pink, yellow eye; Bartley Blush, blush pink with light eye; Hew. Dalrymple, blush pink with dark eye; and Bartley Pink, pink with light eye.—G. H. DALRYMPLE.

## A CLIMBING ROSE.

SIR,—Can any of your readers tell me the name of a free-growing climbing rose, with coppery pink buds which open lighter, but of which the distinguishing feature is the strong perfume of lemon-scented verberna? This rose blooms profusely in May, in the gardens and villas on Lake Como, but I am unable to trace it by this description in any of our rose catalogues, and shall be grateful if anyone can tell me the correct name, and also whether it would be likely to succeed in this neighbourhood.—M. L., Bournemouth.

## CHARM OF MINIATURE DAFFODILS.

SIR,—I quite agree with Mr. Edward Cahen, in a previous issue of THE GARDEN, on the "Charm of Miniature Daffodils and Narcissi." To my mind there is nothing so pretty in a rock garden, and for edging, than these smaller species, and I have read the article with very great interest indeed.

May I be permitted to correct a little, however, his statement regarding *Narcissus calathinus*: this species (for species it is, and not a form of *triandrus*) has been known much earlier than Mr. Peter Barr's famous visit to the Glenans. It is very fully described in "Burbidge"; also, it is not at all extinct in the Glenan Islands: it has been collected on two occasions within the last five years for me, and distributed among my friends.

It is to be found at Drenac and St. Nicholas, and my botanical friend has found, on the neighbouring island of Huat, the Mediterranean *Ismene*, surely a long way from its

normal habitat, but which, of course, like *calathinus*, is accounted for by the very mild climate due to the Gulf Stream.

Incidentally, it was *Narcissus triandrus* and *cyclamineus* which launched me out with narcissus-growing over thirty years ago: for it was in the garden of Mr. Brockbank of Didsbury, about 1889, that he showed me, in his alpine house, the first plants of these two species which were then in bloom, and . . . probably from the very bulbs Mr. Peter Barr discovered in Portugal.

I have seen some very fine *hardy* hybrids raised by Mr. C. F. Johnson of Heaton Mersey, the next village, obtained by crossing *Narcissus triandrus* by Mme. De Graaf.—J. HENRY WATSON.

## A SEEDLING BROOM.

SIR,—I am sending you under separate cover a portion of a seedling broom which may be of interest to you. It was picked on the common, about a mile away from any cultivated broom.

You will doubtless remember that *Genista Andreanus*, the first break in colour from the ordinary *scoparius*, was found on a common in France, I suppose some thirty years ago, by the late M. André. I have not heard since of any variation being found, except in nurseries and gardens where natural crossing takes place. I expect the origin of this present cross is due to the fact that in an adjoining garden a mile away are now many forms of *Andreas* and the bees have carried the pollen. I suppose one may conjecture that in future years it is quite within reason to imagine that the glorious masses of the common yellow broom we see spread over the countryside, will be changed into many seedling coloured forms, such as the one I am sending you, and therefore by man's work some aspects of the countryside will be changed; but, as is frequently open to question, will the result be an improvement or otherwise? —R. W. WALLACE, Tunbridge Wells.

## PLANT HUNTING.

SIR,—May I thank you and Mr. H. T. Denham, M.A., for kind remarks about my recent articles and say how entirely I agree with the warnings to collectors to respect both the plants and the ground around them, and to remember that they belong to the peoples who show us much hospitality? Mr. Denham's letter is most useful and opportune. I would emphasise the desirability of getting alpine plants and seeds from nurserymen whenever possible. I also think a small rucksack is better than a fishing basket, however well curved to fit the shoulders. Plants would keep fresh longer in the former, and as most collected plants are quite small, the question of rigidity and bruising hardly counts. But a large plant-tin (vasculum) will take an ample supply of alpine plants suitable for the garden. I have found a sponge bag useful for quite small roots when collecting for the herbarium, especially when on climbing expeditions. In the quotation (page 309) from John Ball's warning about frontiers, it should be pointed out that in speaking of the Tenda district, the words "on military matters" were omitted from the sentence "any conversation with natives . . . should be carefully avoided." I want again to recommend the excellent little "Atlas Colorié de la Flora Alpine," by Beauverie and Faucheron, 1906, after Hegi and Dunzinger (Bailliére et fils, Paris). The thirty plates with numerous figures are less crude than some in "Hoffman" or Schroeter's "Flore des Alpes," the descriptions equally good and the volume (so little known in England) is no larger or heavier than the former.—H. S. THOMPSON.

## ALUM FOR SNAILS AND SLUGS.

SIR,—With reference to my communications on the above subject of January 10th and February 21st, 1925 (Vol. LXXXIX, pages 25 and 107), I may say that since then I have made an experiment in order to determine how strong an alum solution may be made before it will damage plants when they are watered and sprayed with it.

I commenced with a saturated solution of the material, which is 1 in 10 (approximately 1lb. to 1 gallon of water) at ordinary outdoor temperatures, and I, of course, anticipated that this would require some dilution before it could be safely applied to the roots of plants. I was, however, agreeably surprised to find that such was not the case, and that it produced no injurious effects whatever on the plants experimented upon, namely, a shrubby veronica and a cultivated strawberry. Both of these were in 3in. pots. The former consisted of four cuttings which had been struck in the pot two or three years ago and had grown into a clump about 12ins. high. The other was a Garibaldi strawberry plant which had been pegged down into the pot in the previous season. In both cases the roots were very much pot-bound, and in the case of the veronica they had made their way through the hole in the pot into the soil beneath, in which they had formed a large mass. These were severed from the others at the base of the pot, so that the veronica was severely handicapped from the start. The plants were placed side by side, and daily the roots were drenched with the alum solution and the foliage sprayed overhead with it for about a fortnight. The result was rather surprising, no damage whatever being discernible, and the experiment proved to my satisfaction that if plants of this sort are so resistant to injury from such drastic treatment as this, a saturated solution of the material may be applied to ground occupied by a crop with every confidence that no injury will result to the plants. And in this form it is much more effective than when applied in the dry state, in which form it acts more as a preventive than as a destroyer of the pests.

I think Mr. Cahen (page 94) is wrong about alum acting in the same way as common salt. As I stated in my communication of January 10th (page 25), slugs and snails can slough off salt and soot, not so alum. I also think Mr. Ansdell (page 149) is in error in stating that sulphate of aluminium (used in the Wisley experiments, and which requires lime to be added to it) is alum. Alum is a double sulphate of aluminium and potassium (or ammonium), and as it does not require lime it has the advantage over the Wisley formula that it contains no grit, and therefore does not require to be strained before use to prevent choking of the nozzles of the sprayers. I was pleased to observe that Mr. Ansdell and "H. R. C." (Wimbledon) had met with success with alum.

Soot is a filthy material to use among vegetables, and poisons, such as Paris green, are rather dangerous.—A. D. RICHARDSON, Edinburgh.

## A REMEDY FOR EARWIGS WANTED.

SIR,—I have a bed of about 400 dwarf zinnias. They were fine plants, but now the centres and young shoots have all been eaten. I discovered earwigs were the enemy by going out late at night with an electric torch, when I found the plants covered with these hungry insects. I have placed flower-pots half full of hay on the bed, but have caught none. There are no slugs or snails. I have sprayed with paraffin soap, but of no avail. Can anyone tell me a remedy?—L. P., Leatherhead.



# NOTES FROM CONTRIBUTORS

## WINTER FLOWERING STOCKS.

FROM time to time we are reminded of the beauty and fragrance of stocks in the garden. Often, however, the worth of those of the winter-flowering sorts for pot culture under glass is not sufficiently appreciated. It is not so much a question of the amount of warmth one is able to give them as it is of shelter. Cool treatment is best for them, and if the house is cold, it simply means that their flowering is deferred until the spring days arrive. July is a suitable period for sowing seed. Pans or boxes of soil, light in character, are, I find, better than sowing out of doors. These ought to be placed in a cold frame having a north aspect to ensure coolness for part of the day. Six-inch pots are ample for the final potting, the compost for which should be made up of loam, leaf-mould and well rotted manure. It is curious that the average owner of a greenhouse misses winter-flowering stocks. East Lothians with very little warmth will open their fragrant spikes in early winter, and almost simultaneously that excellent section Beauty of Nice in very attractive colourings, and their preparation is not difficult, but one ought not to let July pass before getting seed in.—W. LINDERS LEA.

## SAXIFRAGA CRASSIFOLIA.

SOME of the larger and better forms of the Siberian saxifrages of the Megasea section are extremely useful plants. The fine branching heads of rose-pink flowers are singularly attractive in spring, especially where a bold effect is desired, and while the elephant-ear foliage is handsome at all seasons, it assumes striking autumnal tints of bronze and crimson. *S. crassifolia* (and I may include its near ally, the beautiful *S. Stracheyi*) always looks well associated with masonry. It is, therefore, a good plant for terraces, the margins of steps or for covering low retaining walls. Moreover, this saxifrage is especially happy where the root-run consists of little more than stones and old mortar, the poor fare and restricted root activity leading to more copious flowering without unduly checking foliage development.



A FINE EDGING OF *S. CRASSIFOLIA*.

In the illustration accompanying this note a fresh rose-pink variety of *S. crassifolia* is shown entirely occupying the top of a retaining wall, the plants being rooted in the stone and mortar. Incidentally, the saxifrage forms an attractive edging to the walk. Full exposure is generally desirable, and there must be no lack of moisture in spring.—A. T. JOHNSON.

## CALENDULAS: THEIR CULTURE IN POTS.

THE highly coloured orange and clear lemon-tinted flowers of calendulas are prized in the garden for their usefulness for cutting in these days, but comparatively few think of them for late autumn and winter blooming under glass. A friend of mine was astonished to find that from a pinch of seed sown last August and the plants potted on in small pots, and finally in 5 or 6 in. pots, he was able to have quite a glow of colour in December and January in his greenhouse, with merely sufficient heat to keep out frost. We know their hardiness out of doors, that they will often go through a winter unhurt; that "self sowers" bring plants in our borders; but, somehow, we fail to associate their culture with that of other plants in pots. They need no fuss, the cooler the house the longer duration of bloom, and old loam with a little sand will suffice for them.—CLAREMONT.

## ROCK GARDEN GYPSOPHILAS.

ALTHOUGH *Gypsophila paniculata* is a distinct favourite, the dwarf species of this genus are far from being well known, and are seldom mentioned among the common rock garden flowers. Nicely placed and planted in little groups so as eventually to form close mats or tufts, they are really pretty things; they flower exceedingly well under appropriate conditions, they keep in blossom for quite a long time, and the cushions of foliage, even when not in flower, look quite attractive.

The dwarf gypsophilas must have a medium soil with good body in it, not a porous, barren sand or a stiff clay. Again, they need lime, and they will grow splendidly over limestone rock or in ground with which has been mixed some old mortar, ground shells or limestone chunks. Every year should see a top-dressing given of manure and soil, or fertiliser mixed with loam and leaf-mould, in order to keep the plants robust and strong.

*G. cerastoides* is a real dwarf, seldom exceeding 3 ins. in height; its white flowers veined with red are very pretty and plentifully produced. *G. repens* is better known. It also is a trailing species, but decidedly larger than the former; its flowers are a light rosy pink. There is a large variety of *repens* to be had also, very distinct and still small enough to be classed as a dwarf, and we have another variety with white flowers not quite so fine as the type itself.—HUGH H. AITKEN.

## A LETTUCE HINT.

UNLESS it is desired to clear the ground, here is a hint worth noting when gathering lettuces. Do not pull up the plant altogether or cut it close to the ground, but leave two or three of the outer leaves on the stump. Loosen the soil round the plants and, if needful, supply water. In a very short while two and sometimes three small buds appear at the top of the stump. These grow rapidly and soon develop into small lettuces. Quite often these second crop lettuces form excellent hearts, and they are always exceedingly crisp and tender. This is a very good plan to adopt where the first crop of lettuces has been rather a failure,

particularly if that failure is due to a dry, hot season. The writer has found this plan succeed with all kinds of lettuces, and the idea is well worth carrying out.—S. LEONARD BASTIN, Bournemouth.

## SCOTS PINE ON A CHIMNEY.

IN or near the year 1914, a flourishing tuft of something green was observed at the top of a cottage chimney that stands about 30 yds. from a hedge in which there are



A LONELY OUTPOST.

some old Scots pines. It was soon recognised as a seedling pine. It grew on quite happily till 1921, when the severe drought of that summer brought its life to an end.

The tree from which the seed evidently came has furnished us with another source of interest, for every few years there appears at its foot that curious large fungus, *Sparassis crispa*, a mass about a foot wide and ten inches high, with the colour and much the appearance of a large bath sponge. It has been recognised by mycologists as a parasite on the root of *Pinus sylvestris*.—G. J.

[As another of the many examples of the peculiarities of plant distribution, this note and illustration are full of interest. Probably carried and deposited by a bird, or perchance by wind (pine seeds being adapted for this mode of distribution), it is astonishing how the seed germinated in such a compost of old mortar rubble and ultimately grew into a vigorous plant.—ED.]

## CATCHING SLUGS.

SLUGS have been very troublesome in my garden of late. I have reduced their numbers to almost negligible proportions in this way: In the evening a number of large cabbage leaves are secured and, after slightly warming these, are spread with lard. The leaves are then placed on the soil with the larded side downwards. The positions selected are those close to attacked plants or where signs of slugs are evident. As early as possible in the morning the cabbage leaves are examined and large numbers of slugs are collected from them and destroyed. In fact, the slugs seem to prefer the greased cabbage leaves to anything else that grows in the garden. It is important that the lard should be unsalted; if there is only a small trace of salt the leaves will be left severely alone.—L. B.



# SIMPLE GARDENING

## ANTIRRHINUMS FOR EARLY FLOWERING.

THE cultivator who wishes to have a very early display of these flowers should make a judicious selection of varieties. There is one that must be included in the list, as it is the most reliable of all, namely, *Nelrose*; the colour is a charming soft shade of pink; the habit of the plant is good, too. For ensuring variety of colour, the following should be included: *Vermilion Brilliant*, orange-vermilion; *Amber Queen*, canary-yellow, gold lip; *Defiance*, intense orange-flame colour; *Golden Beauty*, a rich golden yellow; and *White Queen*. The best effect with these plants is obtained by having few colours, but distinct, and many spikes of each. I always like to have a nice batch of them for early spring flowering. Recently, I grew as many as six hundred plants of *Nelrose* alone, in herring-boxes, twenty-four plants in a box, main flower spikes averaging 2ft. 6ins. in height. When these had been cut down, the plants were transplanted into an outside border, and continued to yield flowers all the summer and the following autumn, outside. The other sorts are not as suitable for such a prolonged display. Now, the plan to adopt is the following one. In July, sow the seeds in a box of good compost, outside, and duly transplant the resultant seedlings 2ins. apart, when small, in boxes. The final planting should be in large pots or boxes at about 4ins. apart. A thin layer of good rotted manure in the bottom and a little bone-meal, mixed with the remainder of the compost, will suffice. The plants should be kept in the open air till early in November.

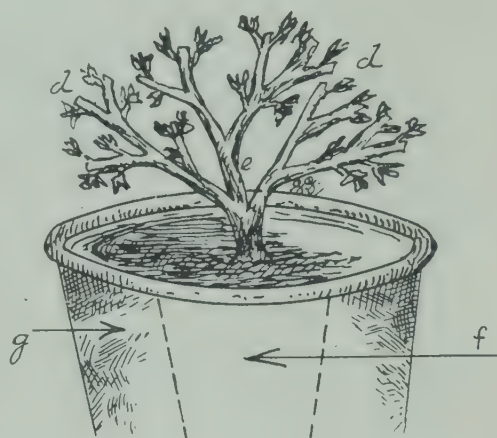
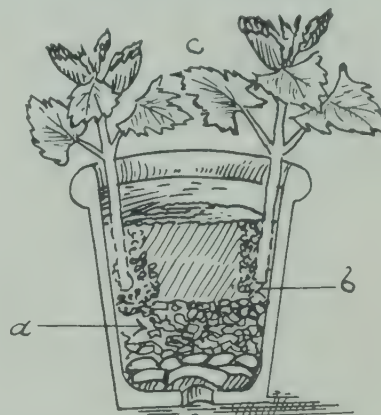
## PEACHES AND NECTARINES.

I am induced to refer to these fruits, especially those growing under glass, because of the great heat and its effect on the trees so grown, especially the old specimens. Several years ago, when we experienced a similar dry spell of weather, many old trees were killed. It is not necessary, and certainly not advisable, to keep the temperatures of the houses high, and the atmosphere dry, during such hot weather. Early in the season we do maintain a rather close atmosphere and keep out cold winds. But during the whole of the summer we should ventilate very freely indeed, opening the glass lights, and doors too, wide. The border soil should be saturated with water—not daily, but weekly, or every ten days—and, fortnightly, apply a good dose of diluted liquid manure. Except when the fruits are actually ripening, the trees should be syringed thoroughly, not merely sprinkled with water from a tiny syringe. Direct the water to the undersides of the leaves, using force. Twice each week, before syringing, lightly sprinkle soot on the border under the trees; and, once weekly, use liquid manure, rather strong, but in a small quantity. When the house is closed, or partly closed, the ammonia arising from the soot and manure will benefit the trees and help to keep down red spider. Nearly all the fruits of the

later sorts have now hardened their stones and should be fully exposed to the sunshine. All shoots of the current year's growth should be tied in, approximately at a distance of 4ins. apart, as on these, next year, fruits will be borne.

## FANCY AND SHOW PELARGONIUMS.

These are treated, in many ways, differently from zonal pelargoniums. Their season of flowering is restricted to spring and early summer, and I find many growers who like these plants do not know what to do with them after the flowers have faded. They have been described as dirty plants, on account of green aphides infesting them. Certainly the aphides like the plants, but their



foliage can be kept as clean as that of any other kind of plant by timely and adequate fumigation. At the end of June the plants present a rather seedy appearance and require special attention. They should be placed on their sides out in the open air and thoroughly syringed. Leave them so for a few weeks, then place the pots upright, prune back late in July or early in August, and insert the cuttings. If a very early flowering is required, prune earlier in July and insert cuttings, water the soil in the old pots and, when new shoots have made a very little growth, shake out the soil from the roots, reduce a few of the longest and re-pot the plants in small pots, to be shifted to larger ones in due course. Cold frame treatment should begin in September. Turfy loam, leaf-soil, rotted manure, bone-meal and sand will constitute a really good general compost. The letter *a* shows drainage; *b*, sand at base of cutting; *c*, cuttings inserted near side of pot; *d*, *d*, old

cut-back plant; *e*, old plant beginning to grow again and its roots shaken out of old pot and re-potted in a smaller one, *f*, to be in due course re-potted in the larger size, *g*.

## ENDIVES, LETTUCES AND RADISHES IN THE HOTTEST WEATHER.

Early in the springtime one wishes to trap as much sunshine as possible for the benefit of the above-named salad plants, with the exception of endive, which is, generally, raised later, from June onwards. At that time there is usually a good supply of moisture in the soil, and the latter remains moist for a considerable period. But now, one wishes to avoid such hot corners, as, unless they can be enclosed to retain moisture, the soil and situation will not prove conducive to quick, tender growth, so essential in regard to salad plants. A border facing north, north-east or north-west is an ideal one from June to the end of August, after which date we again seek all the sunshine possible to ensure, mainly, freedom from damping. The soil should be deeply dug and thoroughly broken up; those who can procure it should use rotted manure and mix it freely with the soil; or, sparingly, dry powdered fowl manure. If the latter be used, there should be 2ins. of manure-free soil on it, the roots of the plants will, in due course, penetrate to the manure and benefit. If these manures are not available, then use wood ashes and burnt soil very freely with the ordinary loam. I find such stimulants very valuable in promoting a quick and healthy growth. Seedlings, if overcrowded in such soils, will be almost useless, as radishes would run to top and lettuces and endive to very big leaves that would not withstand autumn damp and early frosts. The remedy is, then, to sow very thinly.

## THE PLANT STOVE.

This structure is not as fully stocked at the present time as in former days, when many heat-loving subjects were very carefully grown. Well coloured crotons, dracenas and other plants are very effective, both in the stove and in groups arranged for effect, in the summer and early autumn. From the end of June to about the third week in August, fire heat is not required except on dull days and cold nights. If crotons are well syringed and kept in a high temperature with plenty of atmospheric moisture, especially at closing time in the afternoon, they will thrive and need not be heavily shaded, as the leaves are richer in colour than under dense shade. Caladiums also require plenty of moisture at their roots and in the atmosphere, but careful syringing and shading are necessary to prevent scorching of leaves. Coleus plants like sunshine, heat and moisture combined, coupled with judicious feeding. Cuttings of *Panicum variegatum* and *Tradescantia zebrina*, may be rooted very easily now in a sandy compost.

GEORGE GARNER.



## GARDENING OF THE MONTH

## FLOWER GARDEN.

ALYSSUM AND ARABIS.—Continue to propagate by means of cuttings.

ANNUALS.—Feed occasionally with liquid manure. Water and stake.

BROMPTON AND INTERMEDIATE STOCKS.—Sow now in open ground.

CAMPANULAS.—Sow in pans of light soil. Place in frames. Prick off into boxes when large enough and return to frames.

CHINA ASTERS.—Hoe well and give a light mulch of cow manure.

CHRYSANTHEMUMS.—Give a light dressing of artificials. Stake well and spray with insecticide to keep down plant lice.

HEUCHERA.—Propagate by cuttings. Insert them in frames containing sandy soil. Keep frames shaded and closed until rooted.

IRISES.—Give a top-dressing of loam, leaf-mould and 2oz. of superphosphate per barrowload. Water after application.

LAVENDER AND NEPETA.—Insert cuttings in frames. Water, close frames and leave until rooted.

POLYANTHUS.—Prick off seedlings into boxes.

ROSES.—Keep ramblers and climbers well tied in. Water and give liquid manure occasionally. Guard against mildew and, if seen, spray with 1oz. of potassium sulphide to 2 gallons of water. Bud briar stocks in showery weather.

SPRING BEDDING.—Prick out wallflowers, myosotis, etc., in showery weather. Sow more if necessary.

## HARDY FRUIT.

APPLES AND PEARS.—Thin again if necessary. Summer prune. Pinch back side growths to six leaves. Keep down pests. Water if drought continues. Net dessert pears.

APRICOTS.—Keep well watered. Tie in leading shoots. Expose fruits to sun. Mulch and net trees if not already done.

CHERRIES.—Remove nets when early varieties have been gathered and cleanse trees with good insecticide. Syringe daily with soft water and do not let the borders become dry. Thin out shoots of Morellos.

CURRENTS.—When gathered thin out old shoots and encourage basal growths of black currants. Summer prune red currants.

FIGS.—Stop strong growths. Tie in leaders and thin out laterals to enable sun to reach the fruit. Give a light dressing of artificial manure if trees bearing a heavy crop. Water trees.

GOOSEBERRIES.—Mulch trees on light soil. Keep down pests. Shake off caterpillars of magpie moth.

LOGANBERRIES.—Tie up young canes temporarily. Thin out growths.

PLUMS, WALL.—Water well. Syringe forcibly under the leaves to check red spider.

RASPBERRIES.—Cut away old fruiting wood when crop gathered. Do not let the roots become dry. Tie in loosely the new canes. Reduce shoots of autumn-fruiting varieties by removing surplus suckers. Retain sufficient strong and healthy canes. Give the latter a mulch of well rotted manure.

STRAWBERRIES.—After fruiting, clean beds, remove decaying leaves and surplus runners, and lightly fork in some artificial manure. Layer other runners. Use 3in. or 4in. pots and a compost of three parts loam, one part sand and one part old mushroom manure. Peg runners into pots. Keep watered. Prepare site for new plantation, adding plenty of well rotted manure.

VINES.—Spray if mildew seen. Wash off the following morning with clear water.

PESTS.—Watch for and destroy eggs of lackey moth. Keep down woolly aphis, aphis and thrips by spraying.

## VEGETABLES.

ASPARAGUS.—Thin out seedlings to 10ins. apart. Keep beds free from weeds. Give occasional soaking of water. Mulch beds with rotted manure.

BET.—Hoe and weed beds. Make another sowing of globe beet.

CARROTS.—Hoe regularly. Make a sowing of stump-rooted carrots for a winter supply. Give a dusting of soot directly seedlings appear.

CAULIFLOWER.—Plant out late crop. Give plenty of water during dry weather.

CELERIAC.—Draw earth up round plants, and water.

CELERY.—Finish planting out late supplies. Keep well watered, and dust with soot twice weekly. Remove decaying leaves and give a loose tie round plant. Spray with paraffin emulsion to keep down celery fly.

COLEWORT.—Make another sowing for supplies during the winter.

CUCUMBERS IN FRAMES.—Syringe freely. Give liquid manure or artificials when several fruits set.

ENDIVE.—Make another sowing early in the month. Thin out early sowings and transplant seedlings.

FRENCH BEANS.—Sow a small quantity in vacant frames. Water during dry weather.

LEeks.—Earth up, water and give occasional doses of liquid manure.

MARROWS.—Keep well thinned and watered. Pinch back laterals. Cut fruit when young. Feed with liquid manure.

MUSHROOMS.—Make up another bed in the open, selecting a shady position.

ONIONS.—Do not feed after first week. Dust with flowers of sulphur if mildew seen. Spray with paraffin emulsion to ward off onion fly.

PARSLEY.—Make another sowing and water well.

PEAS.—Draw a little soil up round seedlings. Mulch main crop. Clear away earlies and prepare ground for winter crop. Make a final sowing of Little Marvel or Excelsior.

POTATOES.—Lift early potatoes as soon as ready. Leave on ground for a few days before storing in a dark, cool shed. Prepare the vacant ground for winter greens and turnips. Spray main crop potatoes twice with Bordeaux mixture as a preventive against blight. Give final earthing up early in the month.

RUNNER BEANS.—Keep well mulched and supplied with water. Syringe in the evening to assist setting. Keep beans picked.

SALADS.—Make frequent sowings of lettuce, radishes, mustard and cress. Water frequently.

SEAKALE.—Remove flower-stalks.

SHALLOTS.—Lift when growth completed.

SPINACH.—Make a sowing of the prickly-seeded kind.

SPINACH BEET.—Sow for autumn supplies.

SPRING CABBAGE.—Select open site for making main sowing. Use Flower of Spring, April, Ellam's Early or Early Harbinger. Water drills before sowing. Dust with soot as soon as seedlings appear.

TOMATOES.—Keep side shoots pinched out. Stop plants as soon as four trusses of fruit set.

TURNIPS.—Sow Veitch's Red Globe for winter supplies.

WINTER GREENS.—Continue to plant out broccoli, kales, savoys, cabbage, etc., on vacant ground.

## SHRUBS.

CLEMATIS.—Keep growths tied in. Do not allow roots to become dry.

FLOWERING SHRUBS.—Prune after blooming such shrubs as Veronica Traversii, deutzias, weigelas and some of the spiræas. Restrict growths, prevent overcrowding and unshapely bushes. Remove flower-heads of lilacs.

FORSYTHIAS, ESCALLONIAS, HELIANTHEMUMS, ETC.—Propagate by cuttings.

HEDGES.—Clip privet, hawthorn and holly. Fork base of hedges.

## FLOWERS UNDER GLASS.

CALCEOLARIAS, HERBACEOUS.—Prick off seedlings now in pans. Use a light sifted compost.

CARNATIONS.—Pot on young perpetuals. Layer malmaisons in a close frame and admit air when rooted. Layer tree carnations and take some cuttings.

CHRYSANTHEMUMS.—Attend to tying. Feed with liquid manure and soot water. Give a top-dressing when roots appear on surface. Water twice daily. Syringe with insecticide to keep free from pests.

CINERARIAS.—Pot on into 3in. or 5in. pots according to size.

CYCLAMEN.—Shift young plants into flowering pots towards end of the month. Spray plants morning and night and shade from strong sun.

GLOXINIAS.—Pot on small plants into 6in. pots. Take leaf-cuttings.

HELIOTROPES.—Take cuttings. Insert in sandy soil.

HYDRANGEAS.—Remove flower trusses when flowering finished and stand outside in the open.

LILIUMS.—Stand L. longiflorum outside. Give top-dressing to others as roots appear on the surface.

PELARGONIUMS.—Take cuttings from stock plants. Insert in boxes of sandy compost and place in frames. Make firm and water, do not give much water until growth begins. Place winter-flowering plants outside on boards. Pinch off flower-buds.

PRIMULAS.—Pot on greenhouse kinds. Shade and keep cool.

SALVIA SPLENDENS.—Shift into flowering pots. Place in a frame and keep closed for one week.

SCHIZANTHUS.—At the end of the month sow a small quantity.

## FRUIT AND VEGETABLES UNDER GLASS.

FIGS.—Spray trees not bearing fruit with liver of sulphur to keep red spider in check. Attend to pinching and thinning of shoots. Thin second crop fairly severely to ensure good ripe fruit in due season.

MELONS.—Give less water when ripening. On sunny days well ventilate melons in frames. Pinch new shoots to prevent overcrowding. Keep fruits off soil.

ORCHARD HOUSE.—Stand outside in sunny position trees which have finished bearing. Syringe with insecticide. Give frequent applications of liquid manure to apples and pears.

PEACHES AND NECTARINES.—Tie in growths retained. Pinch sub-laterals. Syringe forcibly under the leaves of late varieties to keep down red spider. Do not syringe when colouring. Expose fruits to sun. Ventilate well, leaving air on during the night. Keep down all pests, including ants.

VINES.—Give a drier atmosphere to those ripening. Leave top air on during the night. Remove any plants which are needing water from the vinery. Do not cut off too much foliage if berries splitting. Pinch young vines when they reach the top of the house.

CUCUMBERS.—Top-dress with equal parts of loam, leaf-mould and manure. Syringe well.

PARSLEY.—Sow thinly in frames for winter supply.

TOMATOES.—Pot June-sown seedlings into 3in. pots and place in a sunny position. Top-dress main crop. Pinch side growths regularly.



## THE CROYDON FLOWER SHOW

**R**AIN was the order of the day at the annual show of the Croydon Horticultural Society, held on Wednesday, June 24th. With the exception of one or two years, this Society has always been unfortunate in having a wet day for its show. The attendance at the beginning was, in consequence, small; but as the weather improved, so, too, did the numbers of spectators. A large marquee contained the floral exhibits, and of these, roses were by far the largest class shown. Sweet peas and greenhouse plants were also well represented. There were smaller exhibits of perennials, foliage plants, carnations, violas, ferns, fruits and vegetables.

Many of the roses shown by amateurs were quite equal to those exhibited by trade growers, and it is both interesting and encouraging to see such perfect specimens from private gardens. Among twenty-four distinct varieties of roses for which Mr. A. Norman Rogers, Putney, received a first prize, were fine blooms of George Dickson, Captain Kilbee Stuart and Molly Bligh. Mme. Jules Graveaux, shown by Mr. F. Slaughter of Steyning, was of excellent form; and nine blooms of the variety Gorgeous, exhibited by Mr. S. W. Burgess, were most attractive. Both Mr. H. L. Wettern of Oxted and Mr. S. W. Burgess carried off prizes in several of the rose classes. Mr. H. L. Wettern had excellent blooms of Irish Elegance, Red Letter Day and Jacques Vincent, arranged in vases; and Mr. S. W. Burgess showed perfect specimens of several varieties and a beautiful bloom of Miss Willmott. The Rev. F. R. Burnside also received several prizes for his roses, and in the class of twelve of distinct varieties he exhibited, among others, Avoca, Margaret Dickson Hamill and Ophelia. Mr. F. Ford also distinguished himself, and the varieties Mrs. E. J. Hudson and Gladys Holland helped him to win a first. Mrs. Foley Hobbs and Captain Oswald Fitzgerald, shown by Mr. F. G. Pocock of Warlingham, were very fine. Mr. A. H. Pullen and Mr. C. W. Edwards exhibited some very good roses of high quality.

Among the trade exhibits of roses, Messrs. Chaplin Brothers deserve great credit. Their new roses, Mrs. Herbert Nash and Lady Sydney Eardley Wilmot, together with the coppery orange of Lady Roundway and the bright scarlet-crimson of Red Star, made an effective group. In another section staged by this firm, Betty Uprichard, Lord Charlemont and Mabel Morse could be seen. Mr. J. H. Pemberton was showing many of his own seedling roses, and among them Anne, The Adjutant, Aurora and Ruth. Messrs. D. Prior and Messrs. G. Langley and Sons had prize exhibits, including many of the well known varieties; and among a group of forty-eight varieties shown by Messrs. Frank Cant and Co., Ethel Dickson, Mrs. Henry Morse, Golden Emblem, Lady Inchinquin and Gorgeous attracted attention.

Sweet peas were also a feature of the Show. Most excellent specimens were shown by Mr. F. W. Franks of Tonbridge and Mr. W. H. McAlpine of Nutfield. Their gardeners, Mr. W. Humphrey and Mr. F. C. Willie respectively, are to be congratulated on their excellent method of culture.

Messrs. Carters also were showing sweet peas, together with gloxinias, petunias, begonias and other greenhouse plants. Another meritorious trade exhibit of sweet peas was staged by Messrs. S. Bide and Sons, who were also exhibiting that useful and attractive shrub, Escallonia langleyensis. For their waved sweet peas this firm received a first prize. Mr. Thomas Butcher, the Court florist, had an exhibit of bouquets and wreaths.

A large group of delphiniums and hardy plants, staged by Mr. W. Wells, jun., added

to the interest of the Show. Fine spikes of the delphiniums Amos Perry, Harry Smetham, Corry and Eva adorned the back of the stand. Papaver Mrs. Perry formed a charming patch of colour in the centre of the exhibit. Messrs. J. Cheal and Co. were showing some of their well known star dahlias as well as a few herbaceous perennials. Hardy perennials were also shown by several amateurs. Messrs. Smail and Co. exhibited alpenes and perennials.

A trade exhibit of border carnations, including such varieties as Enid Lowe, Columbine, Loyalty, Mary Murray and Lieut. Shackleton, was staged by Mr. H. Lakeman. The plants looked exceedingly healthy and clean. The collection of gloxinias grown by Mr. J. Randall, gardener to Mr. F. Dyer, J.P., were much admired. The texture of the flowers and the glorious colouring are the results of good culture. A group of greenhouse plants and another of fuchsias from the same gardens were well staged. Mr. E. D. Morton (gardener, Mr. C. H. Fairs) entered for a number of classes, including exhibits of perennials, annuals, begonias, coleus and vegetables, and for several of these prizes were awarded. Many other amateurs had noteworthy exhibits of all kinds, but lack of space prevents any mention of them. On the whole, the vegetables were not up to exhibition standard, not so much in the quality thereof, but in the method of staging and dressing they fell short of the mark.

Lawn mowers, tools and various horticultural sundries were exhibited in the grounds outside by two firms, Messrs. L. H. Turtle and Messrs. E. W. and S. Rogers.

Such a successful show as this should do much to stimulate interest in horticultural matters in the Croydon district, and should also help to maintain the high standard of gardening now reached by many of the inhabitants of the neighbourhood.



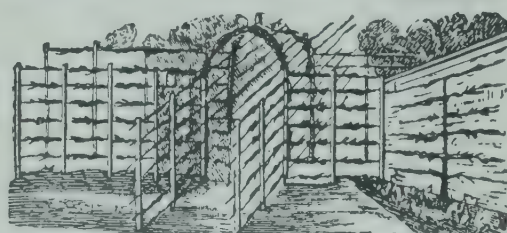
**KILL  
GREEN FLY**

By spraying your roses  
and other plants with  
**CIRENGOL**  
9d. per tube.  
Larger size, 3/-, contains five  
times the quantity of 9d. tube.  
Of all Seedsmen, Ironmongers, and  
Chemists, or post free from  
**THOS. CHRISTY & CO.,**  
4-12, Old Swan Lane, London, E.C.4.

**CIRENGOL**

## HILL & SMITH, Ltd., BRIERLEY HILL, STAFFS,

Makers of  
**IRON FENCING, HURDLES, GATES, WIRE  
NETTING AND GARDEN IRONWORK**



Other Products—Hay and Grain Sheds Dutch  
Barns, Galvanized Corrugated Sheets and  
Structural Steelwork.

Catalogues free on mentioning this paper.  
London: 300, Abbey House VICTORIA ST., S.W.1

Please mention THE GARDEN when writing.

THE KING said "That red Broom is certainly very striking."—(Chelsea Show, 1924)

## New Hardy Crimson Broom

"DOROTHY WALPOLE."

A beautiful novelty for your own garden, and welcome present to send your gardening friend.

Unanimous Award of Merit, R.H.S. (London).

First Class Silver Medal, Ghent International Show.

The richest in colour of any Broom yet seen—rich velvety crimson wings with rose coloured standard. It is as hardy, vigorous and free-flowering as *Cytisus Andreanus*. Leading horticulturists describe the colour of "Dorothy Walpole" as far and away superior to *Cytisus Dallimorei* or any other Broom.

NET PRICES FOR IMMEDIATE DELIVERY  
(STOCK LIMITED.)

Strong pot-grown plants, 15/- each.

Carriage paid rates to any station in Ireland or Great Britain:

One plant, carriage paid, for 17/6; Two plants, carriage paid, for 33/6; Three plants, carriage paid, for 48/6; Six plants, carriage paid, for 94/6.

NET PRICES FOR AUTUMN DELIVERY.

Strong pot-grown plants, to flower next May, 12/6 each.

Carriage paid rates to any station in Ireland or Great Britain:

One plant, carriage paid, for 15/-; Two plants, carriage paid, for 28/6; Three plants, carriage paid, for 41/-; Six plants, carriage paid, for 79/6.

Order your plants now. Supplies ran short last season.

"Lady N— is delighted with the plant and thinks the colour absolutely beautiful."—June 16th, 1924.

"I am so delighted with the Broom 'Dorothy Walpole' that you sent me last year. It has done splendidly and is like a sparkling gem in the garden—one mass of flowers."—Miss C— B—, Dawlish, Devon. May 25th, 1925.

"Everyone who has seen my plant has been astonished at its warm, glowing red."—From a Vice-Chairman, Floral Committee, R.H.S. June 8th, 1924.

At Chelsea Show (1925) a well known millionaire said:—"Your Broom has done very well with me; the colour is far better in my garden than these plants you are showing here." (This is the experience of everyone who has seen it in flower where it has been grown. It abhors any covering and the colour always becomes duller after travelling closed up to a flower show.)

"Gardening Illustrated" Report of Chelsea Show, May 25th, 1925:—"W. Watson and Sons are showing a big group of their new *Cytisus* 'Dorothy Walpole,' a rich-coloured crimson and quite the best variety now for colour. They had a plant of *C. Dallimorei* to show the improved colour of 'Dorothy Walpole' and the contrast was very marked." (So marked is the improvement that the King asked if the plant of *Dallimorei* was a freak.)

"The Field," May 29th, 1924 (from the pen of an ex-Curator of Kew Gardens):—"The richest coloured Broom known is one named 'Dorothy Walpole.' It is as hardy as the common Broom . . . and it is very free flowering. In the open air, and especially in sunlight, the colour is rich velvety crimson . . . more attractive than any of the coloured Brooms yet seen."

**WM. WATSON & SONS, Ltd.**  
Nurseries, KILLINEY, CO. DUBLIN.



# THE GARDEN.

## EBBS' EMPEROR CABBAGE.

Britain's Great Cabbage.  
Most popular Spring Cabbage. Earliest and best in cultivation. Remarkably free from any tendency to "bolt." Awarded Thousands of Prizes. 6d. and 1/- per packet; 1/9 per ounce.

"Your Emperor Cabbage was remarked upon by many persons, not one bolting out of 2,500 plants."—Mr. S. J. Craze, East Park Gardens.

of Vegetable and Flower Seeds for Summer and Autumn Sowing—Post Free.

B & SONS, LTD., THE KING'S SEEDSMEN, STOURBRIDGE.

## WATERER'S GOLD MEDAL RHODODENDRONS AND AZALEAS.

Rare Hardy Shrubs, Alpine and Annual Plants, Vegetable and Flower Seeds, Strawberry plants in pots and open ground runners. Catalogues free.—WATERER, SONS & CRISP, LTD., Twyford, Berks; Shot, Surrey; and London.

## HAKELEY'S PATENTED HOP MANURE.

The original and only substitute for Stable Manure. See article on back cover.

## M. DUNCAN TUCKER & SONS, LTD.,

Conservatory Road, South Tottenham, N.15.—Conservatories, Flower Gardens, Vineries, Peach Houses, Portable Buildings, etc.

## ROSEBATHS, GARDEN VASES, SUN-TRAPS, NESTING BOXES.

Catalogue (No. 4) free.—MORTON, 60, Buckingham Palace Road, S.W.

## WATKINS' CATALOGUE OF CHRYSANTHEMS.

Now ready, and will be sent post free on application.—WATKINS AND CO., Merstham, Surrey.

## FEED THE BIRDS.—Rotless Tanned

Feeding. Small Mesh. As supplied by us to the Royal Horticultural Society. 50yds. by 1yd., 4/-, 6/9; 2yds., 13/6; 3yds., 12/-, 20/3; 4yds., 16/-, 27/-; 25yds. by 8yds., 27/-. Any size supplied. Carriage paid; approval. All per qualities, 3/6 50 yds., measured mesh closed.

## NETTING.—From 2/10 per 50yd. roll.

Best House in the Kingdom. Write us for prices. Thousands of rolls stocked.

## GARDEN HOSE.—1/2 in. by 1-ply., 60ft., 16/6.

Carriage Paid. All sizes supplied.

## TENNIS BOUNDARY NETTING.—Lines top

and bottom, 25yds. by 2yds., 16/3; 3yds., 18/3; 4yds., 25/3. Carriage paid; approval. Standards for fixing to, also playing poles and all requisites supplied.

## LAWN MOWERS, 5 Riveted Blades, high

speeds, brass bushings, close cutting, highly finished, unequalled value, 8in., 24/-; 10in., 25/-; 12in., 27/4. Carriage paid.

## TENTS.—Army Bell, All Complete, New

Designs, Deep Walls from 55/-. Scout Tents, 24.6. Garden, Dining, and all kinds of Tents and Marquees supplied.

## WILLOW CANES.—3ft., 7d. per doz.; 4/-

100, quantities cheaper. Deck Chairs, 3/9

## WATER SPRAYER.—Simplest and Most

efficient for Insecticides, Limewashing, Disinfectants, Creosoting, etc. 31/-. Carriage paid.—E. B. HAWTHORN, LIMITED, Dept. Shrewsbury.

## LAXTON'S STRAWBERRIES AND FRUIT

SEEDS.—Our Novelty List for 1925 is now issued, and contains new Apples, Raspberries, Currants, Strawberries, etc. Garden Lovers should have this. Post Free.—LAXTON'S NURSERIES, Nurseries, Bedford.

## FENCING.—Chestnut Pale Fencing and

Wire Screening. Illustrated Catalogue on request.—THE HENLEY UNDERWOOD CO., LIMITED, 48, Shottermill, Haslemere, Surrey.

## PREMIER AND CHOICE DAFFODILS.—Our

selection of fine New Seedlings, cultivated on our disease-free ground, now ready, and will be sent, post free, to applicants.—BERT CHAPMAN, LIMITED, Rotherfield Gardens, Rye, Sussex.

## CHIMKIM - HIMALAYAN ORCHIDS.—12

different grand-flowering sorts, 25/-; 6 different Cymbidiums, 6/-; 6 Renanthera Imschootiana, 25/-. Post free in U.K. Catalogue free.—THE CHANDRA NURSERY, P.O. Rhenock, Kalimpong (Bengal), British India.

## BARR'S SEEDS FOR JULY SOWING.—

HARDY PERENNIALS and ALPINES for the FLOWER and ROCK GARDEN and the most suitable VEGETABLE SEEDS for Summer sowing. Finest Selected Strains and Tested Growth. Special Lists Free.—BARR & SONS, 11, 12 and 13, King Street, Covent Garden, London, W.C.2.

## IRON AND WIRE FENCING FOR GARDENS.—

Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—BOULTON AND PAUL, LIMITED, Norwich.

## HOSEPIPE FOR GROWERS !!!—Great

purchase of manufacturers stock results in very low price for quality hose; samples free with list, 300 bargains. Everything on approval. Don't delay.—GREENS, Dept. 95, Lytham.

## COLOURED FREESIAS.—My New Price

List is now ready and will be sent on application to G. H. DALRYMPLE, Bartley Nurseries, near Southampton.

## CONTENTS.

	PAGE
<i>Editorial: Glasshouses</i> .. .. .	385
<i>South African Gladioli. (Illustrated)</i> ..	386
<i>Herbaceous Flowers. (Illustrated)</i> ..	388
<i>A Decorative Tree, Davidia involucrata. (Illustrated)</i> .. .. .	389
<i>Iron Garden Gates. (Illustrated)</i> ..	390
<i>Shrubs for a Shady Rock Garden. (Illustrated)</i> .. .. .	391
<i>The Rose Show at Regent's Park. (Illustrated)</i> .. .. .	392
<i>Summer Pests of the Rose</i> .. .. .	394
<i>Mechanical Aids to Irrigation. (Illustrated)</i> ..	394
<i>The Amateur Show. (Illustrated)</i> ..	396
<i>Bournemouth Floral Fête. (Illustrated)</i> ..	397
<i>Correspondence</i> .. .. .	398
<i>The Collection of Alpines; Viburnum Bitchiense; Habit of Violas; A Well Set-up Exhibit.</i> .. .. .	399
<i>Notes from Contributors</i> .. .. .	399
<i>The Double Daisies; Day Lilies; Brachyglottis repanda (Illustrated); A Hybrid Heuchera (Illustrated); The Purple Cone-flower; Puschkiana scilloides.</i> .. .. .	400
<i>Simple Gardening. (Illustrated)</i> .. ..	400

## LOOK! TANNED GARDEN NETS.—All

orders despatched same day. 25yds. by 1yd, 2/-; 25 by 2, 4/-; 25 by 3, 6/-. All carriage paid. Any size supplied. Also Tennis Boundary Nets.—MOORE AND CO., Net Works, Rye.

## PULLETS, pure breeds, laying, 7/6 each,

90/- doz.; Chicks, 1,000, great bargain, month old White or Brown Leghorns, Sussex month old, 2/- each, 24/- doz.; two month, 3/- each, 36/- doz.; three month, 4/- each, 48/- doz.; 500 Crossbreeds, same ages, 18/-, 24/-, 38/- doz., carriage paid live delivery. List free.—CONTINENTAL FARM, Stratford, Essex.

## MANURES.—The most complete little book

on the subject is "The Manual of Manures," by H. VENDELMANS. 4/5; by post, 4/9. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## GARDEN NETS.—Tanned small mesh for

Seeds and Strawberry protection; 30 yds. long, 2 yds. wide, 4/-; 30 by 3, 7s.; 30 by 4, 8/-; 30 by 5, 11/-; 30 by 6, 14s.—Odd pieces of Netting for Bush work, 4/- bundle; all carr. paid.—H. ROBINSON, Net Works, Rye.

## BARGAINS IN GARDEN WIRE, ETC. !!!

Government paid twenty times our price. Ideal for training Peas, Tomatoes, Fruit Trees, Arches, Logans, Beans, Hops, Greenhouses, Pergolas, Chrysanthus, Tying, Fencing, etc. Steel-stranded, waterproof covered, durable. 19/6 mile (full 1,760yds.). Small lots quoted. Get free Samples and list 300 bargains. Postcard to-day!—GREEN'S GOVERNMENT STORES, 213, Albert Street, Lytham.

## SUTTON'S CABBAGES.

The best varieties for spring cutting are:

Sutton's Harbinger .. .. . per packet, 1/- and 1/6  
Sutton's April .. .. . per packet, 1/- and 1/6  
Sutton's Flower of Spring .. .. . per packet, 1/-; oz., 1/6

"I have never grown such lovely Cabbages as I have this Spring from your Harbinger seed. Of 5,000 plants not one bolted. I can strongly recommend Harbinger as the finest Cabbage in cultivation for Autumn sowing."—Mr. J. Parkins, North Hill.

SUTTON & SONS, THE KING'S SEEDSMEN, READING.

## DOBBIE'S PLANT CATALOGUE now ready.

Free to all readers. Please mention THE GARDEN when writing.—DOBBIE AND CO., LIMITED, Edinburgh.

## CHEAP GOVERNMENT WIRE !!!—Great

for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—GREEN'S GOVERNMENT STORES, 69, Albert Street, Lytham.

## GARDEN NETTING.—Best selected, small

mesh, tanned 25 by 4yds., 8/-; or 8yds., 16/-. Carriage paid. Tennis Nets and Standards. List free.—STRAWBERRY NETTING CO., 5, Suffolk Terrace, Lowestoft.

## FULL OF WISE SAWS AND MODERN

instances our catalogue offers all that is brightest and best for the present day garden. The choice plant at Sixpence a time may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—FEILDEN AND CROUCH, 2, Fairseat Nurseries, Wrotham, Kent.

## NEW ZEALAND PLANTS for Seaside

Gardens.—Pittosporum nigrescens for hedges, pot grown plants for planting now, 18/- per doz. Olearia Macrodonia, 1ft., 12/- doz., splendid for hedges. Olearia Haasti, 1ft., 12/- per doz. Brachyglottis repanda, 2/6 and 3/6 each. Clematis indivisa, 2/6 each. Ozothamnus 2/6 each. Muehlenbeckia complexa, 1/6 each.—TRESEDER AND CO., The Nurseries, Truro.

## SEWAGE DISPOSAL FOR COUNTRY

HOUSES.—No emptying of cesspools; a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—WILLIAM BEATTIE, 8, Lower Grosvenor Place, Westminster.

## PRIMULA AND ALPINE SEEDS from

choice (1,500 collection). Rare Seedlings and Rockery Bulbs—Lists free.—REV. J. F. ANDERSON, Glenn Hall, Leicester.

## GARDEN NETS, tanned small mesh for Fruit

and Strawberry Protection, 30 yds. long by 2 yds. wide, 4/6; 30 yds. by 3 yds., 7/-; 30 yds. by 4 yds., 9/-; 30 yds. by 5 yds., 11/6; 30 yds. by 6 yds., 14/- All carr. paid.—COUSSENS & CO., Net Works, Rye.

## GARDEN NETS, tanned, small mesh, for

Peas, Seeds, and Strawberry protection. 30yds. long, 2yds. wide, 4/6; 30yds. by 3yds., 7/-; 30yds. by 4yds., 9/-; 30yds. by 5yds., 11/6; 30yds. by 6yds., 14/- Carr. paid.—ALFRED ROBINSON, Garden Net Works, Rye.

## JAMES BACKHOUSE, F.L.S., F.R.H.S., for

many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to CAER FEGLA, Arthog, North Wales.

## WATER LILIES. — WATER LILIES.

Write for Catalogue. Eighty different varieties listed, in a wonderful range of colours. Other Aquatics and Bog Plants a speciality. Advice given free.—G. REUTHE, Keston Nurseries, Kent.

## LOAM.—Fibrous Yellow Turf Loam. Illus-

trated Catalogue Free.—A. B. JOHNSTON, New Park, Cranleigh, Surrey.

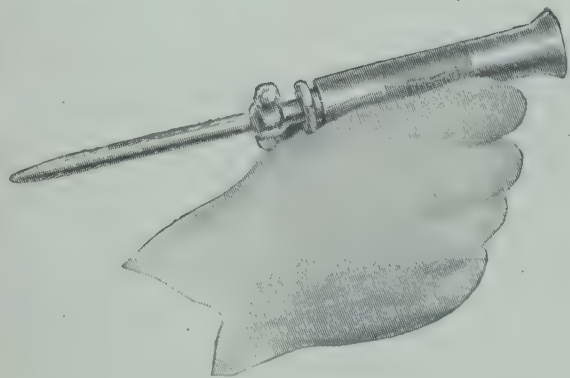
## GREENHOUSE PAINTING AND GLAZING.

—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7lb. tins, 4/-, post free; 14lb. tins, 5/6 each, carriage extra, tins free.—Full particulars from W. CARSON AND SONS, Grove Works, Battersea, S.W.11.



# Save the "arm-ache" of garden spraying

by using this new unique little appliance, which allows of simple handling without muscular effort.



Novel in design, well made and attractive. Made of solid brass, heavily nickel plated. Obtainable from your Ironmonger

**7/6** each

Connector (if required) for  $\frac{1}{2}$  in.  $\frac{3}{8}$  in.,  $\frac{1}{2}$  in. Hose - 1/3 extra.

Or direct from us:

**W. H. WILLCOX & CO., LTD.,**

: : 32/38, SOUTHWARK STREET, LONDON, S.E.1. : :

Please mention THE GARDEN when writing

## THE "PENBERTHY" "Water Gun"

is a combined hose nozzle and lawn sprinkler—shoots a wide, fine spray, or a straight, full stream, as desired, without disconnecting any part—simple in adjustment—will sprinkle lawns of any shape—has spike end that can be gently pressed into soil and left alone spraying as long as required—or can be moved from place to place without shutting off water, or operator getting wet.

## Notes from Maidstone.

### CAMPANULAS.

The Dwarf Campanulas are a most useful and satisfactory group of rock plants.

The season opens with Alyssum, Aubrietias, Saxifrage and Rock Roses, and when their splendour begins to wane, the Campanulas are just coming into bloom. We can recommend the following:—

Garganica, its varieties hirsuta with silvery foliage and W. H. Paine, kewensis, muralis, pulla, pulloides, pusilla, rhomboidea, Stansfieldii, carpatia Riverslea and White Star.

We can offer the above collection, all pot grown plants, for 12/6, packing free and carriage paid.

We can also offer the somewhat rare Campanula nitida, 3/6 each.

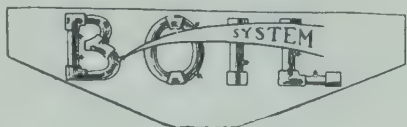
George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.

## RAIN—UNDER CONTROL

**R**AIN—Nature's inconsequent and uncertain overhead irrigation, usually either too generous or too long withheld!

There is only one *effective* method of watering kitchen and flower gardens, nurseries, lawns, tennis courts (hard and grass), bowling greens, croquet lawns, golf courses, cricket pitches and rockeries, and that is the B.O.I.L. System which, by the mere turning of a tap, supplies a gentle mist-like shower of long or short duration, exactly *when* and *where* required.

A new adaptation of the B.O.I.L. System is the "WATERASQUARE" Movable Spraying Line here illustrated, the advantages of which are manifest and manifold.



Fixed or portable watering equipment for every horticultural purpose.

**BRITISH OVERHEAD IRRIGATION, LTD.,**  
UPPER HALLIFORD, SHEPPERTON,  
MIDDLESEX.



"B" Type "WATERASQUARE"

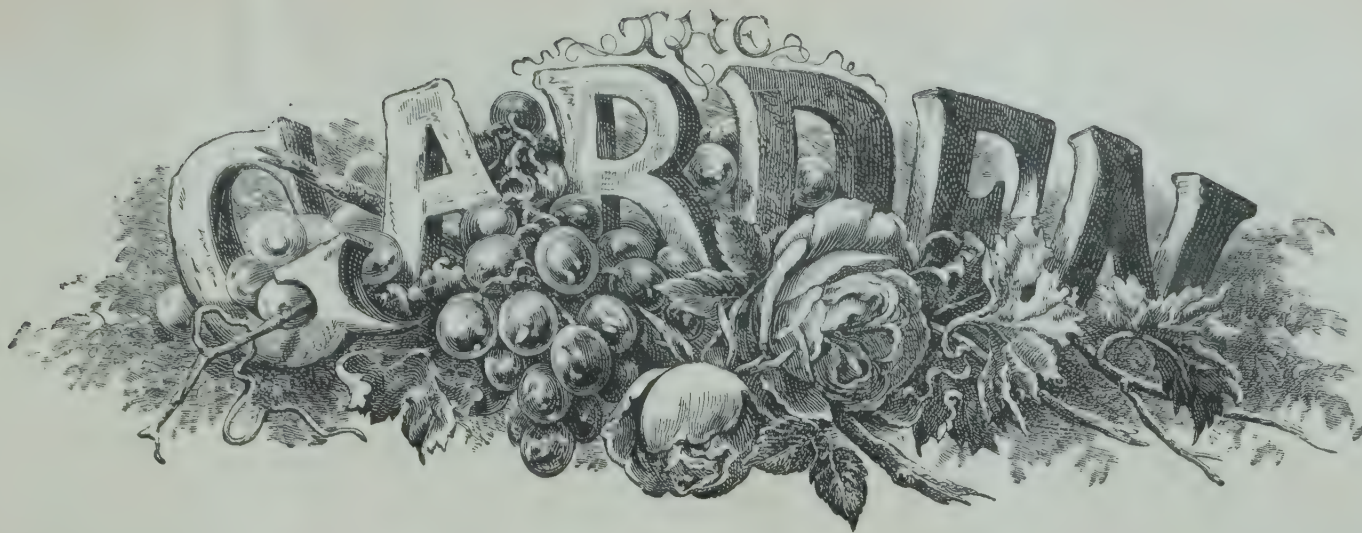
For side-spraying borders, rock gardens, etc. Thoroughly waters an area 15ft. by 12ft.

"A" Type sprays an area of 750 square feet.

PRICE OF EACH TYPE **90/-** COMPLETE  
Carriage Paid in U.K.

When ordering state whether for  $\frac{3}{4}$  in.,  $\frac{1}{2}$  in. or 1 in. hose.





VOL. LXXXIX.—No. 2799.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. Offices for Advertisements: 6-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
Entered as Second-class Matter at the New York, N.Y., Post Office.

JULY 11, 1925

## GLASSHOUSES

AT many of the gardens I visit, the deterioration both in the structure and in the use of glasshouses is constantly brought to my notice. Panes of glass will be missing, the woodwork will lack paint and some of the timber will be rotten; spans will sag, and the ventilating apparatus will squeak on rusty hinges and will, frequently, be unworkable. There is always one excuse for this deterioration, and that is economy; but is it always an economy to let a greenhouse fall into rack and ruin? As a rule, the structure of any well made glasshouse will last more than a lifetime, provided that a certain amount of care is taken to prevent deterioration going too far. An occasional renewal of timber, replacement of broken glass, and the free use of paint, are all that is required to keep a glasshouse in efficient repair: surely not a very heavy outlay! Many of the wrecks of glasshouses I have seen could have been saved if they had been taken in hand in time. But glass in a garden seems fated to be the first item in garden expenditure on which economy is practised.

The heating apparatus is a different question, for, although the structure has not altered very much in design during the last generation, greenhouse heating apparatus has improved out of all recognition, both in simplicity of design and in economical working. Hot-houses with old-fashioned heating are frequently inefficient and costly to run. There are two obvious remedies: one, to renew the heating and replace with new apparatus, such as is made by any reliable firm. This requires some outlay, but not so much as many people imagine. The other, and more economical, method is to run a glasshouse as a cold-house. Both methods have their advantages according to the use to which you wish to apply your glass.

This brings me to the point that few gardeners nowadays have any clear idea of how to run a glasshouse: they have no set plan in their mind at the beginning of the year of the uses to which it will be put during the coming season. It is used in a haphazard fashion, its capabilities are not tested, and much valuable space is too frequently lost. Part of this is due to the lack of foresight on the part of the gardener, part to the incorrigible habit some gardeners have of using a greenhouse as a hospital for sick plants, and part to misguided interference on the part of the owner, whose predilection for some particular plant makes him or her forget that a glasshouse is part and parcel of the whole garden and not a separate entity. When a garden is completely specialised or where a large amount of glass is kept, it is permissible to use a house for some specific

purpose and for that alone, but in that case the gardener and owner realise its particular use and see that it is kept for that alone. But for the ordinary garden it is necessary not only to know its capabilities, but also its limitations. The same applies as much to a cold house as a house with heating. It is useless to imagine that you can fill a single house with vines or Paul Crampel geraniums and still use it successfully for all the numerous uses to which an intelligent gardener will wish to put it.

Too few people realise the possibilities of an old glasshouse, which can be used as a cold house so long as the structure is in a moderate state of repair. It can not only be used for general purposes or as a house for moderate forcing, but can be utilised for growing a multitude of that large band of plants which verge on the tender, usually by having their buds or young foliage cut by spring frosts. It can be used for rock plants, either in pots, as in the Alpine House at Kew, which is always so much admired during early spring, or after removing the staging and the piping, as an actual indoor rock garden, such as was described in *THE GARDEN* in the issue of February 16, 1924, page 91. It must be remembered that where the house is used as an actual garden, the soil in the beds does not get the same aeration and refreshment as soil out of doors, and so has to be renewed from time to time. With a little ingenuity, many successful uses can be found for a derelict house.

It is to be hoped, however, that, whatever use is made of a glasshouse, this entirely unnecessary idea of what is really a false economy is not adhered to. Whether you are an alpine enthusiast or a general gardener, an intelligent use of glass and a realisation of its possibilities will more than repay you. Most of all is a little thought necessary for its successful and economic running—what might be called co-operation between glasshouse, frame and general garden. They all fit into the general scheme of horticulture. E. H. M. C.

### AMONG OTHER ARTICLES IN OUR NEXT ISSUE WILL BE:

IRIS SIBIRICA AND ITS ALLIES, by W. R. Dykes.

CREEPING PLANTS, by Dr. R. Lloyd Praeger.

DISEASES AND PESTS OF VEGETABLES—I, by George Garner.



# SOUTH AFRICAN GLADIOLI

IN THIS ARTICLE A FEW MEMBERS OF A BEAUTIFUL GENUS ARE DESCRIBED FROM PICTURES TAKEN IN THEIR NATIVE HABITAT. THE MAJORITY OF THESE SPECIES ARE, UNFORTUNATELY, EITHER EXTREMELY RARE OR NOT IN CULTIVATION IN THIS COUNTRY.

THAT the old order changes and gives place to new is well known, and one is reminded of this by the receipt of four photographs of South African plants from a correspondent of THE GARDEN, as they bring to mind the popularity of South African—or Cape plants, as they were generally called—in our gardens many years ago. And in this respect it is interesting to consider how the fashion in garden plants changes from time to time, for in spite of the great and universal popularity of gardening in this country at the present day, it is to a great extent confined to the cultivation of showy, decorative plants that will give a quick return. This is especially true of indoor gardening, and at the present day very little interest is taken in the many beautiful stove and greenhouse plants that were at one time so popular. In the case of the former this is somewhat understandable, as the war years and the present cost of fuel and labour have put them out of count; but in the case of greenhouse plants this does not apply to the same extent, for in most private establishments there are houses that might be used for the cultivation of many South African plants that require very little heat. And it is a matter of regret that the many beautiful South African heaths and bulbous plants are more or less lost to cultivation. True it is that the ericas and many of the bulbous plants require skilled cultivators, and at present those who have any knowledge of this class of plants are few and far between, but it only requires an interest to be taken in these plants, and cultivators would soon be forthcoming, and the writer hopes that one day the many beautiful South African plants may regain some measure of their former popularity.

But to return to the photographs. Fig. 1 shows *Babiana plicata* (Baviaantjes or Baboon Root), or Babianer, the Dutch for baboon, in reference to the bulbs being eaten by baboons. This species has lilac blue flowers which are beautifully scented and, in common with others, was at one time in cultivation in our gardens. *B. plicata* is figured in the *Botanical Magazine*, Tab. 576. Some seven or eight other species are figured in the same publication, including *B. stricta*, of which there are several varieties, such as the beautiful *B. stricta* var. *rubro-cyanea*, in which the upper half of the perianth is brilliant blue, and the lower half a rich crimson, the two colours forming a striking contrast.

Their cultivation is quite simple, as they succeed perfectly under the same cultural conditions as are afforded freesias; a cold frame or a cool greenhouse being all that is necessary for their well-being. In the south and west, at least, they

may be grown outdoors, planted in dry, well drained borders at the foot of warm walls narrow borders in front of plant houses being well suited for this purpose. Several of the species are sweet scented, *B. sambucina* being described as elder-flower scented.

*Gladiolus tristis* (avond-blom or avond-blommetje), Fig. 4, shows this somewhat sober-coloured species, the yellowish perianth having the three upper segments minutely spotted all over with reddish-brown dots; it, however, compensates for its lack of colour in being deliciously scented at night. In this country it succeeds quite well planted in a warm, well drained border, especially in front of a warm wall, the corms, of course, being lifted and stored for the winter like other gladioli. It is still occasionally met with in cultivation.

There is a variety of *G. tristis* known as *concolor*, with pale yellow flowers, without any markings, as the name implies; this variety, crossed with *G. cardinalis*, is said to be the parent of the well known *G. Colvillei*. *G. tristis* is figured in the *Botanical Magazine*, Tab. 272, and the variety *concolor*, *Botanical Magazine*, Tab. 1,098.

Fig. 3 depicts a species of gladiolus known in South Africa as the "Painted Lady." This name seems to be applied to several species, as different writers refer to different species, varying, no doubt, in the different districts. Generally the name appears to be used with reference to species and their varieties having pale pink or flesh-coloured flowers with red markings. Thus one writer refers to *G. debilis*, others to *G. angustus*, *G. hastatus* and *G. blandus*, and no doubt there are other species to which the popular name is applied. *G. blandus* and several varieties, as well



Fig. 1 —BABIANA PLICATA, THE BABOON ROOT, WITH BEAUTIFUL SCENTED LILAC BLUE FLOWERS.

as most of the other species mentioned have been in cultivation and are figured in the *Botanical Magazine*.

In their native state the "Painted Ladies" are usually described as growing in light, sandy soil, especially near the sea, or on sunny slopes among bushes and other vegetation; under cultivation they can be grown in warm, sunny borders as indicated for *G. tristis*, or they may be grown in pots in a cool greenhouse, that is, if we can only obtain them.

Fig. 2 shows *Gladiolus involutus*, known as the "South African Bluebell." Here again, as in the case of the "Painted Lady," various writers refer to different species, one writer referring to *G. spathaceus* as the "Caledon Bluebell." According to O. Marloth, this is determined by the districts in which they grow, *G. involutus* being found in the George and Knysna districts, *G. spathaceus* in the Caledon, and *G. Bolusii* in the



Tulbagh districts. One writer, referring to the "Caledon Bluebell," states that it is, especially in the neighbourhood of towns, in danger of being exterminated, as it is largely collected for flower shows and decorative purposes, and too often they are not cut, but are pulled up by the roots. Fortunately, there is now some effort being made in South Africa to preserve the native flora.

It is suprising that these beautiful blue-flowered gladioli have never been introduced to cultivation, at least, I can find no mention of them, although *G. gracilis* (pale blue) and *G. recurvus*, with blue and yellow scented flowers, are both figured in the *Botanical Magazine*. All the blue-flowered species, as well as many others should prove of immense importance to the hybridist, especially when we consider what has resulted from the use of *G. primulinus* during recent years.

Returning to the blue-flowered species in the "Flora Capensis" and Baker's "Irideæ," *G. involutus* and *G. spathaceus*, are described as having pink flowers, while O. Marloth and other South African writers describe them as blue.

There are at least 140 to 150 species of gladioli, a few native of Europe, in the Mediterranean regions, and Orient, but the headquarters of the genus is in South Africa, over eighty species and varieties being described in the "Flora Capensis," while some eighty species and varieties are figured in the *Botanical Magazine*, no fewer than twelve being figured in Vols. XV and XVI; and out of ninety-one figures in this volume, no fewer than fifty-seven are South African or Cape plants. This will indicate how popular this class of plant was at that time.

It may be of some interest to give the original parents of our modern hybrid gladiolus. *G. psittacinus* and *G. cardinalis* are given as the parents of *G. gandavensis*, *G. ramosus* from *G. cardinalis* and *G. oppositiflorus*, *G. Colvillei* from *G. tristis concolor* and *G. cardinalis*, *G. Lemoinei* from *G. gandavensis* and *G. purpureo-auratus*, *G. Childsii* from *G. Saundersii* and *G. gandavensis*, while *G. nanceianus* resulted from crossing *G. Lemoinei* and *G. Saundersii*. From this it will be seen that very few species have been used in the production of the garden race, and one would imagine that the introduction of some of the beautiful South African species should prove of great value to the hybridist, apart from the fact that they are all so beautiful that they are worthy of a place in our gardens for their own individual grace and beauty.

J. COUTTS.



Fig. 2.—A GROUP OF THE SOUTH AFRICAN BLUEBELL, *GLADIOLUS INVOLUTUS*. THIS SPECIES IS FOUND CHIEFLY ON THE MOUNTAIN SLOPES IN SHELTERED POSITIONS.



Fig. 3.—ONE SPECIES OF THE SOUTH AFRICAN "PAINTED LADIES." THESE FLOWERS ARE GENERALLY FOUND GROWING NEAR THE SEA AND THRIVE EXCEEDINGLY WELL IN SANDY SOIL.



Fig. 4.—*GLADIOLUS TRISTIS*, THE SOBER COLOURED SOUTH AFRICAN AVOND BLOM OR EVENING FLOWER. THE BLOSSOMS ARE SCENTLESS IN THE DAY TIME, BUT EXHALE A STRONG PERFUME AT NIGHT.



# HERBACEOUS FLOWERS

**W**HAT exactly do we mean by herbaceous flowers? The Oxford Dictionary does not help us very much to find an answer to this question. I suppose, strictly speaking, herbaceous flowers are those that do not make a woody stem—plants that spring up when the returning sun melts the snows of winter and die down again when the sad days of autumn return—in fact, plants that hibernate. There is something wonderfully fascinating in watching for the first shoots of herbaceous flowers to push through the bare ground. They are for the most part fine, old-fashioned flowers, such as one finds in cottage gardens. But one must not be too strict, a few annuals, a dwarf bush or two may be allowed to grow with them in the border. Somehow one always associates such flowers with a border. The combination "herbaceous border" seems to conjure up something quite definite to the mind of most gardeners. But there are many ways of making one. A friend of mine built himself a magnificent house and thought he must have a herbaceous border to finish off his garden. Not understanding anything about such things he

that vigorous, healthy look which is their chief characteristic. In planting herbaceous flowers it is of the utmost importance to know which are going to flower together, for on this depends the colour effects. For example, what could be more lovely than the tall, pink spikes of lupins against the gentian blue of *anchusa*. I like to separate my herbaceous plants into groups with an eye to these colour effects, which I can get from the use of quite ordinary plants in the garden, laying on my floral colour with a bold brush like an impressionist artist. The results have always been most satisfying to the eye. Behind come the stately hollyhocks, the single varieties being much more beautiful than the double kinds. Then there are the scabious, some of which are not truly herbaceous, being biennials or even annuals. They cannot be left out, however, they are so effective if massed together, all colours—blue, mauve, pink, white and maroon. A shady corner must be reserved for foxgloves, with wonderful dapplings and markings on the bells. They, too, are not truly herbaceous, but once in the garden they sow themselves and come up year by year.

Later on come the Michaelmas daisies to brighten up the back of the borders. There are now some lovely varieties to choose from, a great advance on the older types.

Need one do more than just mention the delphiniums, the kings of herbaceous flowers. They should not be dotted about, but planted in bold groups so as not to miss the effect of a mass of contrasting blues.

Then there are the lupins of every imaginable shade: blue, yellow, white, pink, mauve and violet. Of these there is an old legend, which tells how the Blessed Virgin on her flight into Egypt, rebuked them for making such a noise when trodden on, fearing they would thus attract the attention of Herod's soldiers to the whereabouts of her first-born. What could be more lovely than their rich green leaves after a shower, each with a little globule of water resting in the centre. We must not leave out the monkshoods; there are several varieties of them, all quite interesting. A dark violet one, flowering in May before the first lupin shows colour. Another comes much later on and is of a paler shade of blue. Some are yellow and some of two contrasting colours. They are rather despised by gardeners, beloved of the bees and of use to medicine, for from them is obtained the alkaloid,

aconitine. Of spiræas there are several which are well worth a place in our herbaceous garden. Of them, perhaps, the best is the pink, though, personally, I am very fond of *filipendula*, with its great tufts of white flowers gracefully balanced on long, slender stems rising from a large rosette of fernlike leaves.

Scarlet *lychnis* and *geums* add a bright splash of colour to the middle of the beds, to which must be added the Oriental poppies, though the newer pink shades are more beautiful, if, perhaps, not quite so exciting. Then there are the peonies, who, so Maeterlinck tells us, "have drunk their imprudent fill of the sun, burst with enthusiasm and bend forward to meet the coming apoplexy." We should grow the newer kinds, however, not the old-fashioned red one which is so difficult to blend into any colour scheme. Of yellow herbaceous flowers there is the *doronicum*, in the early spring, and golden rod for the late autumn.

Another yellow composite with a wonderful rayed flower is *Inula Oculus Christi*, a name which has a fascination in itself apart from its supposed resemblance to the eye of Christ.

Another yellow flower which brings a pleasant gleam of sunshine into the garden in May is the Welsh poppy (*Meconopsis cambrica*). Of white and yellow daisies we have a large variety suitable for filling the gaps between the taller plants.

"Sweet William with his homely cottage smell," and the phloxes are two very useful plants which will brighten the



THE APPEARANCE OF LUPINS IS CONSIDERABLY ENHANCED IN A SETTING OF EVERGREEN SHRUBS.

had one designed for him. Before long a plan arrived, about a yard long, beautifully coloured like a jig-saw puzzle or a patchwork quilt, and on each little coloured space was a name most beautifully written. He was so bewildered, that he packed off his plan to a nurseryman and told him to send along the plants there indicated. In due course they came and he proceeded to plant his border "according to plan." That is one way of dealing with the problem. Another is to plant them just as they come, and some very strange effects one sometimes gets! I remember one case in particular in which a common peony got into the company of a scarlet Oriental poppy. The result can well be imagined. Year after year the two colours clashed and may still be doing so, for all I know to the contrary. To my way of thinking the setting is everything. A long border with a grass path along one side looks very well and is delightful in a kitchen garden. For those fortunate enough to have a garden enclosed with old red brick walls, a more suitable setting could not be found: Tall hollyhocks behind larkspurs and lupins in front of them, smaller things between them and a good border of, say, pinks or thrift, what more could possibly be desired?

Dark, closely clipped yew trees make a wonderful setting for delphiniums and the various colours of the lupins. But the yews must not be too near or their roots will draw all the nourishment from the soil and the plants will not present



garden from June right on into the late autumn. When properly massed, with all the colours nicely mingled, these two flowers do much to add colour to the picture we are painting of the herbaceous garden.

We must have some "gold dusted snapdragons," and a few *eschscholtzias* to complete this picture, though neither are strictly herbaceous. Then there are the columbines, which derive their name from the Latin for a dove, from the fanciful resemblance of their flowers to a bevy of doves with their heads close together, as if in conversation.

Though the long spurred varieties are far and away the most beautiful, with their lovely contrasting colours of the most delicate shades, all columbines are worth growing, even the common wild kind.

In the foreground there are one or two other plants which deserve mention. *Tradescantia*, named after John Tradescant, who, in the seventeenth century, made a collection of flowers, which he gave to Elias Ashmole, who in turn presented them to the University of Oxford. This is the Virginian spiderwort, though cottagers call it the Widow's Tear, presumably from its purplish blue flower. It has only three petals, like its cousin in the greenhouse. Then there is the

Bleeding Heart (*Dicentra spectabilis*), with its curiously shaped flowers, which are supposed to bear a resemblance to rosy-hued hearts.

Lungwort (*pulmonaria*), the blue and pink flowers of which are the first to open year by year, is worth a place in some shady corner, for the dark green foliage, splashed with white, which succeeds the flowers in June. Though, this by no means exhausts the possibilities of herbaceous flowers, mention has been made of some of the best of them.

There are various ways of getting herbaceous plants. We can buy them from a nursery, we can obtain them by barter from our friends and we can raise them from seed. This last method, though it requires considerable patience, is by far the most interesting to the true gardener. There is a great fascination in watching for the first characteristic leaves to appear. Then we have the prolonged pleasure of seeing the plants getting larger and larger until they are fit to take their place in the herbaceous garden itself. Finally, there is the excitement of the first flowers. This is especially the case with the lupins and larkspurs, for, if it is mixed seed or seed we have saved ourselves, there is no telling what undreamt-of beauty is about to be revealed.

EDWARD CAHEN.

## A FINE ORNAMENTAL TREE

**D**AVIDIA INVOLUCRATA is certainly, when carrying in spring its large, hanging, paper white bracts, one of the most striking trees in existence, quite distinct from anything we have been used to so far. A member of the family Cornaceæ, it was first noticed by Father David in 1869 on high elevations in Tibet. Twenty-eight years later, in 1897, Father Farges, a missionary in Szechuan, sent to the late Maurice de Vilmorin at Les Barres ten seeds. The inscription on the seed bag ran: "Davidia, grows in moist places; valuable seeds, requiring special care." Only one plant, still existing at Les Barres, arose from these seeds. In the years 1899-1902 Mr. Wilson, during his first expedition to China, was much impressed by the beauty of the tree and sent numerous seeds to the famous firm of Veitch, where thousands of seedlings were raised. This marked the introduction of the plant into the horticultural world.

Curious to relate, the decorative value of *Davidia* does not seem, so far, to have been fully realised. True, glowing reports have been made repeatedly about it by those who had the good fortune to see this rare tree in its home, but it is nearly always only as isolated specimens that one meets it in dendrological or amateurs' collections. What if any bold gardener had had the idea of planting a whole avenue of it? The tree here represented, although the impression given is a very poor one indeed to anyone, like the writer, who has seen the plant in all its gorgeousness (many bracts had already fallen to the ground when the photograph was taken) gives some idea of what would have been the result. This is one of the first specimens sent out by the Coombe Wood Nurseries, planted some twenty years ago in a site that apparently suited it admirably, that is, moist and shaded from several directions by tall conifers. It now attains over 30ft. in height. The owner is Mr. Gerard, who spends all his

spare time in his arboretum of La Fosse, near Vendôme, France. In May of this year the sight was truly unique. Thousands of bracts attaining as much as 8ins. long and 4ins. wide completely smothered the tree from top to bottom, waving right and left at the slightest gust of wind. This specimen is, I believe, one of the largest in existence in Europe. It had never,

so far, flowered so profusely. On its upper part, unfortunately little noticeable in the illustration, owing to effects of light, there were certainly more bracts than leaves!

As is well known, modern botanists have divided the once monotypic genus of *Davidia* into three species: *D. involucrata*, *D. Vilmoriniana* and *D. læta*, according to pubescence (absent or present) and colour (glaucous or yellowish) of the underside of the leaves. The specimen here figured answers to the description of *D. Vilmoriniana*. From the purely horticultural point of view, however, perhaps it is better not to complicate matters and to retain only the name of *D. involucrata* for all cases. As regards showiness and general appearance there is little difference between the plants.

*Davidias* like rich, deep soils, moist atmosphere and some shade. They are admittedly shy flowerers at first, but increase their flowering capacity considerably when a certain age and size have been attained. Their hardiness is complete, except perhaps in case of very late frosts,

when young shoots can be scorched to a certain extent, a fact that rarely happens, however, for the tree starts rather late into growth in the spring. Now that seeds are produced close to nurseries and plants accordingly easily propagated (which was far from being the case some time ago), it is to be hoped that this most beautiful tree will find its way into gardens more and more where the soil and position prove favourable.

CH. LERAY.



A FINE SPECIMEN OF DAVIDIA INVOLUCRATA OVER THIRTY FEET HIGH AT LA FOSSE ARBORETUM.



# IRON GARDEN GATES

BY GERTRUDE JEKYLL.

**W**HEN garden walls are going up and ways of entrance are being considered, the possibility of a beautiful feature is often overlooked—this is an iron gate of good, simple design. Such a chance is lost when, as is so often seen, a garden is shut in with heavy wooden doors. There may be cases when the wooden door is a necessity, as where a cold draught of wind may be injurious or where there is something unsightly that it is desirable to hide. Though in these notes it is only some simpler form of gate that is being considered, it is well to remember, and to see when occasion allows, any of the fine old gates that exist at the entrances of the grounds or gardens of our great houses, or such as are accessible to everybody at Hampton Court.

Iron gates were rare in England in the reigns of Elizabeth and James I, but the art of making them flourished from the end of the seventeenth century for about a hundred years. That wonderful designer and practical smith, Jean Tijou, was at work in England in the reign of William and Mary; he was followed closely by Bakewell of Derby, and by clever

the almost riotous freedom and sumptuous enrichment of the true Italian work.

The usual gate had a general filling of vertical bars; the filling thickened at the bottom with additional rods known as dog-bars. These served a double purpose: the practical one of keeping out dogs, and the other, of pleasing the eye by giving extra weight and solidity to the base of the gate. Then, at



A DESIGN WHICH, ALTHOUGH DECORATIVE AND ENHANCED BY THE PIERS, IS YET RESERVED.

convenient hand-height, came the lock rail, often with some filling of ornament, and also satisfying the eye with a distinct horizontal treatment at about one-third of the height; the remainder upward being of plain bars. In the more important gates there was a finely designed and wrought overthrow, with scrollwork, and the initials or some heraldic emblems of the owner. But in the simpler gates this was omitted altogether.

Where there are iron gates there should be brick or stone piers, if not of importance, at least of some size and solidity.



A BEAUTIFUL THOUGH SIMPLE GATE IN THE ITALIAN STYLE.

smiths from Wales and the West Country, and a number domiciled in and about London. Some Italian gates were imported early in the eighteenth century. Their general design was quite different from that of the English smiths, for it was more free in line and was composed of much scrollwork, with a further enrichment of acanthus foliage and flower forms. There are examples of such work by the clever Welsh smiths, the brothers Roberts, who wrought in the earlier decades of the eighteenth century; but they never acquired, or possibly never attempted,



A FINE, STRAIGHT DESIGN IN IRONWORK.



In the finest examples they were of elaborate architecture with sunk panels or niches, and sometimes with a complete entablature. These would be surmounted by stone or leaden urns or heraldic beasts. In the case of the lesser type of gate the piers were commonly finished with stone balls.

There are many places where really fine piers have become completely smothered with ivy or ampelopsis. If the gates and their piers have any merit, such overgrowth should never be allowed. This may be generally known now, but it is well to repeat the warning, because these rampant things grow quickly and, though they may have been cleared a few years ago, they may again be threatening to obscure good building.

## SHRUBS FOR A SHADY ROCK GARDEN

**F**AR more recognition has been given of late years to the value of the shady slopes of the alpine garden and the many beauties that these display. Here we find numberless beautiful anemones, habermas, mossy and encrusted saxifrages, ramondias, primulas, etc., flooding the slopes with a welter of beauty and colour over many months of the year. If, however, we miss our shrubs, the inevitable flat look is unavoidable and—perhaps without knowing why—we miss something that is essential to the completion of a really beautiful picture.

Happily, the range of subjects that may be included among our possible varieties is a fairly wide one—quite sufficient, at any rate, to obviate all chance of monotony. It is worth while noting, too, that the choice may be made to cover an equally wide range of soils, and those species that are most likely to succeed upon the particular soil in which you propose to plant should not be left out of consideration. For example, if you have a shaded peat bed, azaleas are worth special attention, though one must confine plantings to the right kinds. One may paint a whole slope in blazing glory in early summer by judiciously massing *amœna*, with its vivid rose crimson flowers; *Hinodegiri*, rising to 2½ ft. with fiery red flowers; *Maxwelli*, vivid carmine red; *occidentalis*, white and very sweetly scented; and *Yodogawa*, semi-double and pale lavender pink. If these are indulged in in any quantity, the massing will become a somewhat expensive matter, but it is possible to produce superb effects by using a few plants in a concentrated area. Once planted such a grouping improves every year, especially where the beds are heavily dressed with leaf-mould each spring. It must not be forgotten that buds, although expanding in spring, are formed during the preceding summer, and therefore it is most important to see that the roots are never allowed to become dry.

Requiring precisely similar soil and cultural conditions, near relatives of the above, *Rhododendrons præcox* and *ferrugineum* are both splendid plants, and have the gift of appearing particularly fascinating as single specimens in the small garden. Where there is more sand in the peat a charming little shrub—so dwarf that it scarcely raises itself above the soil—is to hand in *Sedum Lyonii*. The foliage of this somewhat resembles the myrtle, and each stem terminates in a cluster of rosy white flowers. Owing to its extremely dwarf stature, the plant must, of course, be kept well forward, otherwise it will be entirely lost. Either on sandy loam or peat success

There is no reason to forbid any reasonable planting that may partly come over the piers, but it should be carefully watched and either guided or checked, as may be desirable.

Iron gates have to be painted. In our climate the most generally satisfactory colour is a dark grey inclining to a bluish tone. There is no harm in what is sold ready mixed as "dark slate," but it is the better for a fair admixture of dark blue. The French commonly paint their garden ironwork with red lead; it is good for the iron, but not pleasing to the eye. The pretty pale green with which they paint their garden tubs and seats is also unsuitable for iron, for which, at least in England, the dark blue-grey is much to be preferred.

will attend the planting of *Daphne Mezereum*, one of the first plants to break the winter by flowering. *D. Cneorum*, the garland flower, is quite a different plant, forming dwarf rounded bushes of dark green foliage smothered in spring with deliciously fragrant heads of pink flowers.

For splendid effects in any soil it would be difficult to



AN EFFECTIVE DRIFT OF *ERICA CARNEA*, THE WINTER-FLOWERING HEATH.

excel *Cotoneaster humifusa*, the vivid brilliance of which is produced entirely by the berries. The growth is of the trailing order, resting almost flat on the ground, and the whole plant presents a most gorgeous colour picture in September and October when the leaves become scarlet and crimson and gold, the berries being brilliant red. Another charming little berried shrub that is not, however, to be distinguished by the word showy is *Berberis dulcis nana*, an evergreen bush producing yellow flowers very freely, these being succeeded by blue berries.

The partridge berry, *Gaultheria procumbens*, is extremely pretty for massed plantings in any shady spot where the soil consists of peat or leaf-mould, and gives the effect of a carpet of blue green leaves over which are snow white flowers followed by fine crimson berries. Succeeding magnificently in any soil that is free from lime there are two species of *Erica* that will flourish in shade or partial shade, the latter, of course, being preferable. *Erica carnea* may be obtained either in white or vivid rose, and both are splendidly effective massed according to the size of the garden. *Erica vagans* gives us still more variation in colour, for it may be procured in blush white, pure white, deep red and a so-called scarlet which means, as usual, a fairly good red. H. W. CANNING-WRIGHT.



# THE GREAT SUMMER ROSE SHOW

UNDER the auspices of the National Rose Society, this great annual Summer Show was held at Regent's Park on July 3rd and 4th. Although the weather was somewhat threatening, the attendance was good and indicated the intense interest in and enthusiasm for our national flower. The arrangements were excellent and the committee, especially Mr. Courtney Page, the Secretary, is to be congratulated on them.

The majority of the blooms were in really fine condition, considering the long spell of drought which preceded the Show. The wealth of colour could only be adequately described on canvas, and on all hands one

interest and instruction, especially when dealing with some aspects of the clean and healthy cultivation of the rose.

## THE GROUPS OF ROSES.

The general effect of the generous groups of cut roses arranged on tabling along the centre of the large tent was excellent, and a closer inspection of the individual exhibits served to increase this impression. In most instances they were of such merit that the judges must have had no enviable task in making their awards.

There were three classes for these representative groups of cut roses, and in the largest there were eight tables.

ment of linked pillars with baskets at the base, and the group was attractively edged with polyantha varieties. The baskets were filled with fine blooms of Lady Roundway, Lady Inchiquin, Mabel Morse and other sorts. Admirable groups were also arranged by Messrs. F. Cant and Co., Messrs. B. R. Cant and Sons and Mr. J. H. Pemberton.

There were four of the medium-sized tables, and here the first prize was awarded to Messrs. A. J. and C. Allen for a table which contained a wealth of bloom but lacked the edgings which some other exhibitors used to good effect. Their best sorts were Mabel Morse, Mrs. H. Morse, Ruth, Hortulanus Budde, Betty Uprichard, Golden



THE DEEP SHELL PINK BLOSSOMS OF DAINY BESS.



SCARLET GLORY, AN EXCELLENT CRIMSON SCARLET SORT.

heard remarks of appreciation on the skill and patience shown in cultivation by the leading rose growers in the country. It is astonishing how, year after year, the flow of novelties is kept up, and this year is no exception. Many fine new varieties were staged, and it is somewhat difficult to discriminate between their individual merits. There can be no question that improvements in form, habit of growth, colour, fragrance and flower production have taken place rapidly within the last few years, and it is difficult to forecast what the future holds in store for us in this connection.

In addition to the main exhibits of roses, other flowering subjects in season, such as delphiniums, anemones, sweet peas, and carnations, were also staged. Another notable feature was the number of exhibits of sundries. Many of these exhibits were of great

The champion trophy was awarded to Mr. E. J. Hicks for an arrangement of pillars and large vases which displayed a great wealth of excellent bloom. The corner pillars were made up of Ophelia, Joanna Bridge, Mrs. H. Stevens and Climbing Golden Ophelia. The stands contained Los Angeles, Mabel Morse, Charles E. Shea, Mrs. E. Hudson, Betty Uprichard and other valuable sorts. The colour arrangement was excellent and the group was well finished. The chief feature of the second prize group was generous baskets of roses which Messrs. Alex. Dickson and Sons filled with Betty Uprichard, George H. Mackereth, Mrs. Wemyss Quin, Gwynne Carr, Mrs. Henry Morse, Golden Emblem, Shot Silk, Mrs. Henry Stevens and other admirable roses. The third prize was awarded to Messrs. Chaplin Brothers for a fascinating arrange-

Emblem and Souvenir. Messrs. Henry Morse and Sons, who were second, had linked pillars of Vesuvius, Etoile d'Holland, Betty Uprichard, Mrs. Henry Morse and Mabel Morse. Mr. Walter Easlea, who was third, had an uncommon and successful arrangement of pillars and small hanging baskets which made a graceful group.

The smaller group was so successful with exhibitors that the tables overflowed into an annexe. Mr. J. Mattock, who was first, had a charming arrangement of vases of Lady Inchiquin, Margaret Dickson Hamill, Betty Uprichard and Rev. F. Page-Roberts on stands rising above vases of Moonlight, Mabel Morse, Los Angeles and similar varieties. Messrs. Jarman and Co. were second with a table of Mrs. H. Morse, Paul's Scarlet Climber, Souvenir de Claudius Pernet, Lady Curzon and other



sorts. Mr. F. J. Edwards and Messrs. J. Jefferies and Sons were both awarded third prizes.

The A. C. Turner Cup, which is offered for a collection of thirty-six varieties, was won by Messrs. A. Warner and Son with an admirable exhibit in which Independence Day, Golden Emblem, Mrs. Henry Stevens, The Queen Alexandra Rose and Red Cross were prominent. Messrs. F. Cant and Co. were second with excellent vases of Padre, Archie Gray, Maud Cuming and Mrs. T. J. English. Mr. J. Mattock was third in this good class.

The best eighteen varieties of decorative roses were shown by Mr. G. Prince, who had admirable vases of Mrs. H. Stevens, Shot Silk, Souv. de Claudius Pernet and Betty Uprichard. Mr. F. Spooner, the second prize winner, showed K. of K., Innocence, Paul's Scarlet Climber and Isobel. Mr. G. Lilley was third.

#### EXHIBITION ROSES.

The championship trophy, which is offered for seventy-two distinct blooms of exhibition varieties, always induces a keen competition, and this year the trophy was won by Messrs. F. Cant and Co. with an admirable collection of good fresh blooms in which the colours were artistically arranged. The chief varieties were Dean Hole, Mildred Grant, Lady Ashtown, Clara Curtis, Medea, Admiration, Archie Gray, J. L. Mock and Mildred Grant. Messrs. B. R. Cant and Sons were a very good second, and they included excellent blooms of The Queen Alexandra Rose, Mabel Morse, Mabel Turner, Manifesto, Lady Inchiquin, Rev. F. Page Roberts and Nellie Parker. The third prize was won by Messrs. D. Prior and Son, who included a good new pink rose in Mrs. Murray Allison and also showed C. K. Douglas, Cleveland and Rev. F. Page Roberts of great merit.

The collections of thirty-two varieties in three blooms of each were mostly of high merit. Messrs. B. R. Cant and Sons were first, and they included trios of Rev. F. Page Roberts, Horace Vernet, George Dickson, A. Hartmann, Edith Cavell and Captain Kilbee Stuart. The second prize collection of Messrs. F. Cant and Co. was characterised by the high colour of many varieties, such as Mrs. Henry Morse, Mrs. G. Marriott, George Dickson, H. D. M. Baron, Ethel Dickson and Alex. Ernsie, which were admirable.

The China trophy, offered for forty-eight blooms, distinct, was won by Mr. C. Gregory,

who included H. V. Machin, Mrs. Henry Bowles, J. B. Clark, Mabel Morse, Earl Haig and Mme. Jules Gravereaux in a praiseworthy exhibit. Messrs. Jarman and Co. were a close second, and their excellent collection included Premier, Joseph Welch, Mrs. Sam Ross and Freda. Mr. George Prince was third.

The first prize in the extra class for the above divisions was won by Mr. H. Drew, whose twenty-four fine blooms included Mrs. E. J. Hicks, Mabel Morse, Coronation, Edith Cavell and Mrs. H. R. Darlington. Mr. E. J. Hicks, the second prize winner, had good examples of Constance Soupert, Mrs. George Norwood, Maman Cochet, White Maman Cochet and Mabel Morse. Mr. G. Burch was a good third.

In the class for trios of eight varieties, the quality reached a high standard of excellence. Mr. George Prince, the first prize winner, included Mrs. George Marriott (of which one bloom was the silver medal tea rose), Mrs. C. Hall, H. V. Machin, Earl Haig and Ethel. Messrs. Jarman and Co. were third, and they included Mrs. C. Lamplough, Joseph Welsh, Mme. Jules Gravereaux and Mrs. C. Hobbs. Mr. H. Drew was third in this excellent class.

The tea and noisette roses were better than might have been expected. Messrs. C. Longley and Sons were first with eighteen fresh blooms of such sorts as The Bride, W. R. Smith, Molly Sharman Crawford and Mme. Jules Gravereaux. Mr. G. Prince won the second prize with large blooms of Maréchal Niel, Mme. Jules Gravereaux, Mrs. Foley Hobbs and Mrs. H. Taylor; while Messrs. D. Prior and Son were third.

The best twelve blooms of any new rose distributed since January, 1921, included Marcia Stanhope, Enid Charlemont and Mabel Morse, shown by Mr. J. Mattock. Mr. E. J. Hicks in his second prize collection included Lady Inchiquin, J. G. Glassford and W. Hordes.

The best twelve of any similar variety were vivid blooms of Captain Kilbee Stuart, shown by Messrs. D. Prior and Son. Marcia Stanhope, shown by Mr. H. Mattock, was second; and Lady Inchiquin, by Mr. G. Prince, was third.

#### NEW AND NOTEWORTHY ROSES.

**DAINTY BESS.**—Probably the best hybrid tea single variety which was on show. The flowers are composed of beautiful crinkled and waved petals of a fine delicate pink shade, while a deeper shade is to be found on the reverse of the petals. It appears to be very floriferous and a fine contrast is provided by the foliage. It is certainly one of the best roses of the year. The flowers have a slight haunting fragrance. Awarded a gold medal. Shown by Mr. W. E. B. Archer, Ashford.

**GWYNETH JONES.**—This is certainly one of the most beautiful and decorative pernetiana varieties we have seen from the point of view of colour, which is unique. The flowers are semi-double, composed of petals of good texture and of a shade of fiery orange. It is indeed striking. The cluster of yellow anthers provides a vivid contrast in the flower itself, while these stand out from the bright green foliage. The flowers have a slight perfume. This variety received a gold medal. Shown by Messrs. McGredy and Son.

**MRS. J. HEATH.**—A good bushy hybrid tea variety bearing large-sized and pointed blooms. In the bud the colour is a mixture of orange crimson, but on expanding the petals become a shade of yellow tinged with red, the centre becoming deep yellow. It should prove a fine all-round variety. Shown by Messrs. McGredy and Son.

**LADY F. STRONGE.**—Another variety in hybrid teas of unique colouring. The large, well formed blooms are reddish to violet rose colour, shading to yellow at the base of the petals, which are of good size and



THE HANDSOME BLOOMS OF GWYNETH JONES, A GOLD MEDAL VARIETY.

substance. Shown by Messrs. McGredy and Son.

**CECIL.**—A fine pernetiana variety carrying large single flowers with spreading petals of a light yellow shade with a central cluster of deeper yellow headed stamens. Shown by Messrs. B. R. Cant and Sons.

**MRS. BEATTY.**—An excellent hybrid tea bearing large, handsome, long, oval-pointed blossoms of perfect shape. The petals are of good substance and of a shade of delicate lemon yellow, which is all the more striking against the dark glossy green foliage. Awarded a gold medal. Shown by Messrs. B. R. Cant and Sons.

**RICHARD E. WEST.**—Splendid flowers of a good yellow colour characterise this hybrid tea variety. The petals are markedly reflexed. Shown by Messrs. Alex. Dickson, Limited.

**SCARLET GLORY.**—An admirable hybrid tea variety carrying medium-sized blossoms of a good crimson scarlet colour. The petals are of velvety substance. The colour has the tendency of all crimson varieties, although not marked to any degree, to turn slightly blue on the margins of the petals. The flowers are also well scented. Shown by Messrs. Alex. Dickson, Limited.

**GEORGE H. MACKERETH.**—A very good crimson hybrid tea, carrying blooms which are sweetly fragrant. Shown by Messrs. Alex. Dickson, Limited.

**DUCHESS OF YORK.**—A fine decorative sort, bearing blooms of a wonderful colour. The centre is orange, shading outwards to pinkish and light yellow tones. Shown by Messrs. Alex. Dickson, Limited.

**MRS. S. W. BURGESS.**—A vigorous decorative hybrid tea variety with blooms of a cream orange colour, with a slight fragrance. Shown by Mr. S. W. Burgess, Tonbridge.

**GOOLAND BEAUTY.**—A cross between Golden Emblem and Sunburst, bearing blooms of a clear golden orange colour, which shades off to creamy yellow. The flowers are large and semi-double. Shown by Messrs. D. Prior.

**KIRSTEN POULSEN.**—A single dwarf polyantha sort, carrying numerous flowers of a deep rose red colour. Shown by Messrs. D. Prior.

Owing to shortage of space, the amateur and artistic classes, along with further notes on new roses, have unavoidably been held over until our next issue.



THE LARGE OVAL FLOWERS OF MRS. BEATTY.



## SUMMER PESTS OF THE ROSE

THE novice on consulting his text-book on roses and their enemies may well be appalled at the many and diverse insects and fungi that are probably mentioned. Of fungus diseases there will probably be round about a dozen, while of insects the names are legion. But, luckily for his peace of mind, the great majority are only very occasional in their visits to cultivated roses and may be ignored.

Diseases fascinate the scientist, who is somewhat akin to collectors of plants in that he gloats over the number he can tabulate. It is well that insect and fungus attacks should be recorded, with, where possible, suggestions for combating them. But this should always be prefaced by a plain statement of their relative unimportance to the cultivator. This the National Rose Society very wisely does in its most valuable little book on "The Enemies of the Rose," and heartens the amateur by stating that he is likely to be seriously troubled by only grubs and caterpillars, green fly and mildew.

During last spring the infestations of green fly on roses and, indeed, on most hardy plants, were more serious than usual. But within the past week or so there has been a marked decrease in their numbers. For destroying and, what is more important, preventing green fly a very mild insecticide suffices. In fact, during the growing season any strong corrosive wash is likely to do serious harm to the bushes as well as kill the green fly. It is only necessary to use a solution of quassia chips and soft soap, or some similar wash, which will adhere to the aphides and choke the breathing pores. The quassia chips should be boiled for a considerable time. Some say for twelve hours, but this period can be materially shortened if the quassia chips are first soaked in cold water for a week or so. A recommended formula is 2½ lb. of quassia chips and 1 lb. of the best soft soap

(do not procure a cheap type, as this will contain an excess of soda) to 25 gallons of water. The soft soap should be thoroughly dissolved in boiling water and well stirred into the quassia extract before being added to the bulk of the water. This is an effective and economical fluid, but for those who have neither the time nor inclination for preparing it there are such proprietary mixtures as "Abol," "Nico Soap" and "Compound Quassia Extract," which are advertised in THE GARDEN. For all purposes it is important to use exactly the recommended quantity of all prepared insecticides and fungicides.

Although not serious in its effects, the "cuckoo-spit" or "frog-hopper" is often a nuisance on rose bushes by reason of the unsightly froth-looking covering of the nymphs. The simplest method of clearing them is to syringe forcibly with clear water so as to remove the froth and then to spray with one of the insecticides above mentioned.

In some seasons the leaf-rolling sawfly is fairly prevalent, and in addition to rendering the bushes very unsightly, this insect is actively harmful, largely by preventing the leaves from exercising their proper functions. In this case the leaflets which contain the greyish larvæ are rolled up tightly and, once the pests have a hold, there is nothing for it but to hand-pick and to destroy the affected leaves. In the early stages of an attack it is well to spray with a nicotine wash immediately after the hand-picking of the affected leaves.

These are the most important of the sucking insects which are likely to trouble the rose grower, and while a few of the biting insects, such as the leaf-cutting bee, which bites out circular pieces of the foliage to form its nest, may disfigure the bushes, they are more annoying than harmful and rarely visit bushes that have been sprayed fairly regularly with a quassia extract, as this seems to render the leaves distasteful.

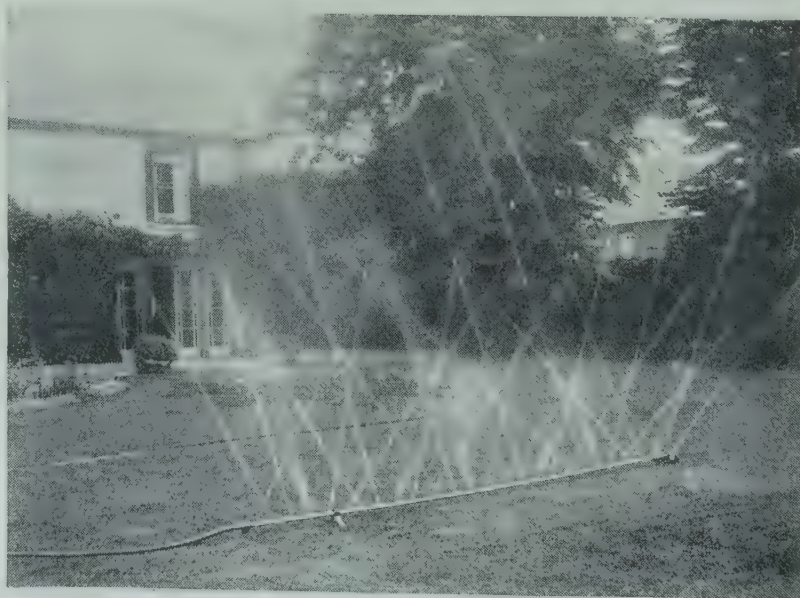
It must be clearly understood that one spraying alone is far from being likely to clear the roses of any pest. A suitable wash will kill the insects it touches, but some few are always missed, and there is the unborn generation to consider, so that the spraying should be repeated at short intervals. There are a few rules to be considered. Spraying should not be practised on sunny days or in the evenings of cold days. The first would be likely to result in scorched foliage and the second may cause a chill which would be very harmful to the roses.

Except for large areas, the spraying syringe such as is made by the leading firms is the best implement to apply the fluid with. The ordinary garden syringe, though admirable for its proper use, is unsuitable for applying an insecticide, as it is difficult to spray the undersides of the leaves and to obtain sufficient pressure to get a fine spray. It is always worth while to strain the wash before using it to make sure that it will pass through the sprayer without choking the jets. Where large areas have to be dealt with, a good knapsack sprayer such as the Mystic, Four Oaks or Stonehouse is admirable and easy to use.

With regard to fungoid diseases which attack roses, the present writer, being perhaps old-fashioned in some things, holds to the opinion that in many cases they are due to improper cultivation, and that where the roses are grown well fungoid diseases are mostly unknown. Mildew is an exception, and in many ways the rose grower is, with this, the victim of circumstances. As is well known, certain varieties are more liable to attacks of mildew than others, and in gardens which suffer from mildew it is always wise to grow only the more resistant varieties. As a preventive, "Kuremil" is excellent, or liver of sulphur dissolved at the rate of 1 oz. to 5 gallons of water, especially if a tablespoonful of liquid glue is added to make the spray adhere. A. C. B.

## MECHANICAL AIDS TO IRRIGATION

THERE can be no doubt that one of the most important factors to be considered by the successful cultivator of practically all crops is the problem of providing a plentiful and sufficient supply of water during prolonged periods of hot and dry weather. While it must be admitted that, here in England, one seldom has cause to complain of extended droughts, it is, nevertheless, equally true that the growing seasons are few and far between when the rainfall and sunshine alternate in a sufficiently well balanced manner to render



THE "WATERASQUARE" LAWN SPRINKLER IN ACTION.

the lengthy and arduous task of artificial watering unnecessary. A few days of hot sunshine during the summer months cause the top spit of soil to become parched and dry very quickly, to the detriment of most seedlings and plants of a shallow-rooted nature. Often such a state of affairs will result in serious damage to flower beds or lawns which have been the subject of much careful and tedious work in the past; while in the kitchen garden considerable delay will be caused before the crops reach maturity. The task of tending each individual



bed or plant by means of a watering can is—in all but very small gardens—a laborious one, often taking up a great deal of time which could be profitably employed elsewhere, while the use of an



THE "GIANT" RAIN KING, WITH FOUR JETS AND MOUNTED ON A STAND.

ordinary plain hose-pipe cannot be regarded as a great deal more satisfactory. More often than not, the ground is saturated here and there in patches, and, unless great care is taken, the operator usually succeeds in getting more or less soaked himself.

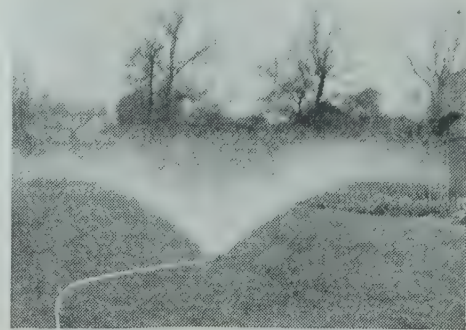
During recent years this problem has received a great deal of consideration from skilled engineers, with the result that it is now possible to obtain a great number of ingenious mechanical contrivances capable of distributing moisture over the ground in such an even and gentle manner that it closely approximates the actual fall of steady rain. The majority of these appliances can be obtained at moderate charges, and can usually be depended upon to give good service with an absolute minimum of labour involved. In most cases, it is only necessary to connect a hose-pipe to the instrument, turn on the water supply, and leave the rest to the machine. The initial cost is, of course, governed by the size and nature of the apparatus desired, and one can obtain small portable machines for dealing with lawns or gardens sectionally, or invest in a complete irrigation system which may be easily controlled by the manipulation of a valve.

For those who wish for a small but efficient machine at a very reasonable figure, either the "En Tout Cas" Pocket Sprinkler or the "2-Purpose" Rain King Sprinkler can be obtained. The former, which weighs only 1½ lb., will successfully cover with a fine mist-like spray a circle of 40 ft. diameter, and the latter, while capable of covering the same area, has the twofold advantage of being readily convertible into a hose nozzle, in which case it can be quickly adjusted from a long, heavy spray with a range up to 55 ft., to the finest mist. At the moment of writing, I have just received particulars of a similar machine of Canadian manufacture, known as the "Water Gun." It serves the combined purposes of a hose nozzle and lawn sprinkler, and appears to be a very serviceable little tool. It is fitted with a pointed spike which can be stuck into the ground at any desired angle, thus enabling it to be used for beds or borders of unusual shape, or for getting into obscure corners.

By the simple turning of a small handle the supply can be regulated from a fine mist to a heavy stream, and quite apart from its use in the garden, it will be of great assistance in washing down outside windows, greenhouses, stone floors, etc. For those who wish to cover larger areas at one operation, an excellent choice remains, and the following brief descriptions of some of the better known makes will, perhaps, be of assistance in making a selection. The "En Tout Cas" Rotary Sprinkler is a very ingenious machine weighing only 7½ lb. As its name implies, it propels a jet of fine or coarse spray in a circular direction up to 80 ft. in diameter. By a simple adjustment it can be made to oscillate backwards and forwards over a half-circle only, of the same diameter. It can be used in a variety of ways for watering lawns, flower beds or vegetables, and the water pressure required is only 12 lb.

The "Stewart Rain King" is a very effective type of sprinkler which is so simple and sturdy in design that a child can manipulate it. It will cover an area of 70 ft. on a pressure of 20 lb. (which is about the usual house pressure) and can be instantly adjusted for either stationary or revolving operations. It weighs only 2½ lb., stands 5½ ins. high, and has a base measuring only 6 ins. by 5½ ins. A giant pattern of the same machine can also be obtained mounted on a standard and fitted with four revolving jets, instead of two as in the foregoing type. Each of these jets can be arranged to spray in different directions at once, and it is capable of covering a circle 90 ft. in diameter. The "Pluviette" Standard is undoubtedly one of the

finest lawn sprinklers ever made. Working on a turbine principle, it will distribute a rain-like spray over an area between 300 and 400 sq. yds. from one centre. It is well adjusted for



THE "STEWART" RAIN KING AT WORK ON A LAWN.

varying water pressures, and is easily regulated to throw a fine, medium or coarse spray.

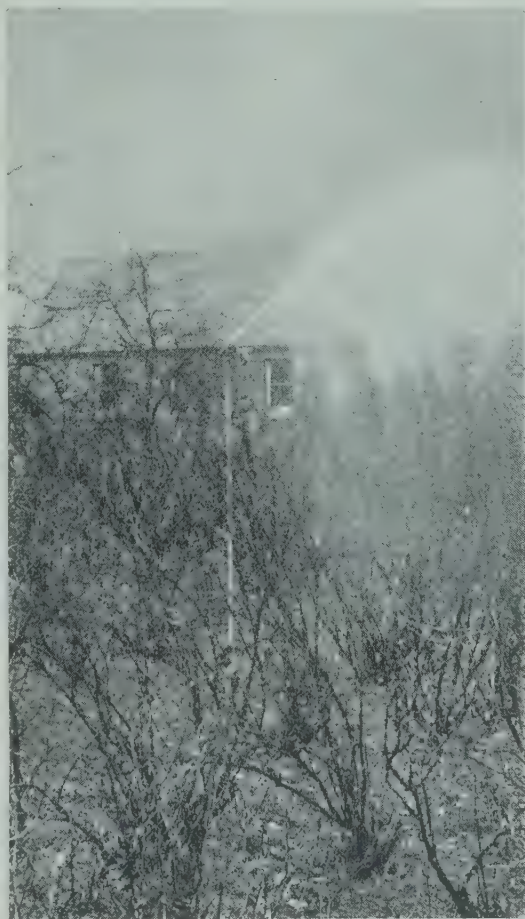
A more recent innovation of a slightly different nature has just been put on the market by that progressive firm, Messrs. British Overhead Irrigation, Limited. It is known as the "Waterasquare," and consists of a movable section of specially prepared pipe in 15 ft. lengths. It is fitted at intervals of a few inches with nozzles set at different angles. Each length will, on an ordinary pressure of water, completely cover an area of 750 sq. ft. The total weight of the apparatus is only 42 lb., and for convenience of shifting from place to place a small trolley is fixed at one end and the whole fitting can be pushed along in the same way as one wheels a barrow.

It is certainly one of the most effective methods for watering lawns and, in addition, is specially suitable for all kinds of sports grounds, such as bowling and golf greens, croquet lawns, etc., where a close and fresh green turf is desirable.

No article on irrigation would be complete without some reference to the great amount of experimental work which has been carried out by this firm, and it says much for the success of their endeavours when one finds their complete overhead systems being fitted on such eminent nurseries as Messrs. Carter's of Raynes Park, and Messrs. Sutton and Sons of Reading. The system has also been adopted by the London County Council on many of their public tennis grounds; while the number of market growers who have installations are far too numerous to mention. At their extensive demonstration grounds at Shepperton can be seen a site of 14 acres devoted to market produce. By means of the system fitted it is possible to spray every part of this ground with a supply of 20,000 gallons of water per hour, at the trifling cost of less than 2s.

Watering systems suitable for greenhouses, conservatories, lawns, gardens and orchards can also be inspected here, and any reader visiting these works can be assured of seeing demonstrations of a very practical and interesting nature.

A. J. C.



THE "EN TOUT CAS" ROTARY SPRINKLER ON A PERMANENT MOUNTING FOR SPRAYING BUSH FRUIT.



# THE AMATEUR SHOW

**O**PINION will probably be divided on this, the first Amateur Show, held under the auspices of the Royal Horticultural Society, at Vincent Square Hall on June 30th and July 1st. A comprehensive schedule of prizes had been arranged and it seemed that entries were fairly numerous in most of the classes; but there was a half-hearted atmosphere hanging over the Show, and for this the Society itself must, in part, be blamed. It would have been quite an easy matter to have re-arranged a number of the non-competitive exhibits so as to have filled the vacant spaces on the staging, and it should have been someone's duty to see that these collections, which were such an important feature of the Show, bore cards giving the names and addresses of the exhibitors.

Among the cut flowers competition was keen, especially in the case of sweet peas. Roses were not nearly so plentiful as might have been expected, even allowing for the drought, but the collections of general hardy shrubs were particularly interesting.

As we have suggested, the collections which were not for competition were admirable. Mr. W. B. Cranfield, East Lodge, Enfield Chase, deservedly received a gold medal for his collection of hardy ferns, which certainly could not be surpassed, even if it could be equalled. He filled the entire end of the Hall with well grown plants of a great many valuable and interesting

H. T. Pitt, Rosslyn, Stamford Hill. Hybrid liliiums of great interest and such species as *LL. giganteum*, *pardalinum*, *croceum*, *regale*, *Hansonii* and *umbellatum* were displayed by Mr. R. O. Backhouse, Sutton Court, Hereford. A showy collection of *Lychnis Haageana* was there incognito.

A delightfully arranged collection of hardy flowering shrubs, sent by Colonel Messel, Nymans, Haywards Heath, included several varieties of *leptospermum*, *cistus* and *escallonias*, *Indigofera Gerardiana* and *Philageria Veitchii*, an interesting hybrid between *Lapageria rosea* and *Philesia buxifolia*. Mr. Lionel de Rothschild had a supplementary group of well grown shrubs similar to those in his first prize collection.

A large floor group, by Major Pam, Wormley Bury, Broxbourne, was arranged in the form of three water lily pools, surrounded by various sedges and grasses, bamboos, *spiræas* and Japanese irises, and this received much well deserved admiration.

## COMPETITIVE CLASSES.

Roses were given the first place in the schedule, but it must be confessed that the blooms were generally somewhat disappointing. Although there were two classes for them, there was only one rather poor exhibit in the three vase class. The chief exhibits of tea and hybrid tea varieties were much better. The Rev. F. R. Burnside, a well

Mr. G. A. Hammond, Silvercroft, Burgess Hill, who was second, had brilliant blooms of J. G. Glassford, Sunstar and Frances Gaunt, while in the third prize set of Mr. T. Evans, Reading, there was an enviable vase of Golden Emblem.

The general effect of the many spikes of delphiniums was good, though it would have been an improvement had more space been allowed. To the disappointment of some visitors, the two leading exhibits, which were put up by Mr. H. K. Farnell, The Elms, Acton Hill, and Mr. F. C. Stoop, West Hall, Byfleet, were composed of seedlings, but they were decidedly the best in the Show and were very attractive. Mr. E. H. Blakesley, Fairlawn, Redhill Common, had decidedly the best in the class of six vases, and he included Mrs. W. Wells, King of the Delphiniums and Lady Hammick. Mrs. G. M. Lewis, Sawyer, Brentwood, who won the second prize, showed two pretty vases of Madonna seedlings.

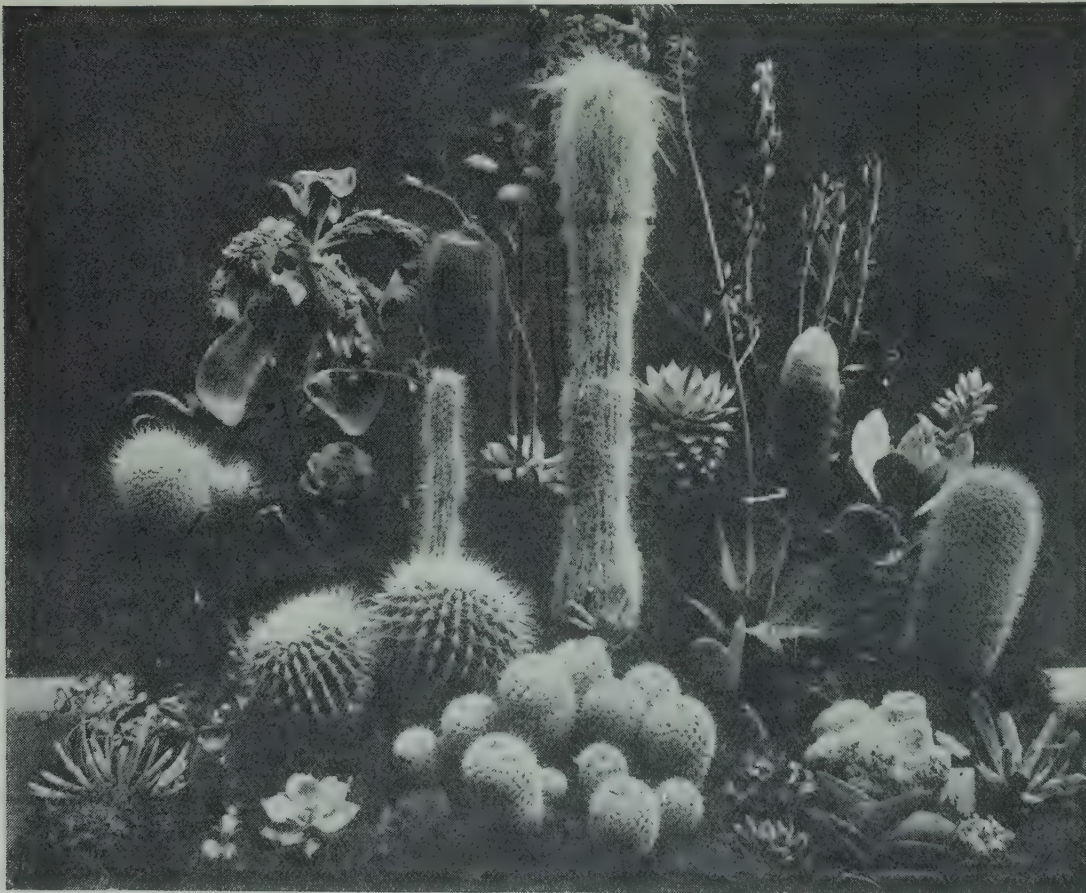
Sweet peas were certainly the most attractive flowers in the Show, and in excellent condition considering the trying season. The chief prize was awarded to Mr. R. W. Whitehead, Hillside, Reading, who had charming vases of Charity, Jean Ireland, Warrior, Orchid, Sunset and other good varieties. Mr. F. Churchward, Dacombe, Newton Abbot, was a good second, and he included glowing vases of Royal Sovereign and Tangerine Improved, two excellent orange coloured varieties, Mrs. Arnold Hitchcock and Wild Rose. Mrs. Hobart Tyler, Merton Court, Reading, had rather smaller blooms, but they were noteworthy for their intense colours.

Captain George Young, The Old House, Swallowfield, Berks, was first with six vases of very good sweet peas, which included W. J. Unwin, Grenadier, Warrior and Majestic, and Lieutenant-Colonel H. L. Scott, Hawthorn Lodge, Bracknell, was a close second. The best three vases were staged by Captain R. A. Barney, Faversham, who had lovely spikes of Charming, Powerscourt and Royal Scot. It was really too early for gladioli, but Mr. J. Fairlie, Acton, showed White Giant, Snow Wreath and Alice Kennedy very well and won the first prize.

Herbaceous flowers were of ordinary quality. Mr. Lionel de Rothschild, Exbury, Hants, was first and his most noteworthy vase was of *Rhazya orientalis*, an uncommon evergreen, introduced from Greece in 1889. It may be described as being an erect, narrow-leaved periwinkle, bearing plenty of small bright blue flowers, which it continues to produce for quite three months. In an unplaced collection there was a vase of *Allium giganteum* of striking appearance.

Carnations were well shown by Mr. R. Morton, Woodside Park, who was first with Linkman, Sam Weller, Mary Murray, Elaine and other good sorts, and in addition gained a first with three vases of border pinks. Mr. J. Fairlie was first with Border Yellow, Pasquin and Mrs. Hawksbee carnations. Violas were well shown by Mr. A. E. German, Hornchurch.

The new plant class was not very interesting. Mr. Lionel de Rothschild, won the gold medal with a large vase of *Buddleia alternifolia*, a Chinese species which was illustrated on November 8th last and which received an award of merit on June 27th, 1922. The long, slender sprays of fragrant, soft mauve flowers are very effective. The silver-gilt flora medal was won by Mr. F. C. Stern, with *Indigofera amblyantha*, a pretty rose coloured little shrub which unfortunately, droops when cut. The remaining exhibits were dormant rhododendrons.



THE ATTRACTIVE GROUP OF CACTI STAGED BY MR. REGINALD CORY.

varieties of scolopendrium (the hart's tongue fern), *Athyrium Filix-fœmina* (the lady fern), *Polystichum angulare* (the shield fern), *Osmunda regale* (the Royal fern), and many others.

Another unique collection was that of cotyledons, so attractively arranged by Mr. Reginald Cory, Duffryn, Cardiff. These ranged from species with large fleshy leaves to the smaller little clusters of almost sedum-like appearance. Sir Jeremiah Colman sent an admirable collection of his famous orchids from Gatton Park, as also did Mr.

known rosarian, won two first prizes with admirable blooms. His six vases included W. R. Smith, of lovely colouring, Dean Hole, *Mélanie Soupert*, White Maman Cochet and Mrs. Foley Hobbs, and his vases of hybrid perpetuals, Coronation, Louise Crette and Hugh Dickson were also of best quality. Another noted amateur rosarian, Mr. H. L. Wettern, Oxted Place, Oxted, was first in the class for twelve tea or hybrid tea varieties, and he included quite good examples of *Avoca*, Mrs. Wemyss Quin, Lady Inchi-quin, George Dickson and La Champagne.



## FLOWERING SHRUBS.

Had the space been allotted more generously, the exhibits of flowering shrubs would have gained considerably in attraction. They were mostly of the "Riviera" type, which thrive best in the warmer parts of the country. Mr. Lionel de Rothschild, in his first prize collection showed a good dark form of *Buddleia Colvillei*, *B. alternifolia*, *Leptospermum Boscawenii*, *Helichrysum rosmarinifolium*, *Zenobia pulverulenta* and similar species. Lieutenant-Colonel Stephenson Clarke, Borde Hill, Cuckfield, included very floriferous branches of *Leptospermum Nairnii*, *Abelia floribunda*, *Benthamia capitata* and *Magnolia parviflora*. Sir William Lawrence, Burford Lodge, had a lovely vase of *Rosa Moyesii*, with *Solanum crispum* and *Ononis fruticosa*; and Mr. Reginald Cory, included the glowing orange-scarlet *Lonicera Scarlet Trumpet*, while some shrubby veronicas were conspicuous in the collection

from Mr. F. C. Stern, Highdown, Goring-on-Sea.

## PLANTS IN POTS.

A tasteful group composed chiefly of *Lilium longiflorum*, highly coloured crotons, spiræas, hydrangeas and palms, won the first prize for Mr. A. P. Brandt, Bletchley Castle, and Mr. C. Langmer, Ardgowan, Swallowfield, who used *Cocos Weddelliana*, crotons, caladiums, crassulas and gloxinias as effectively, was second. Mr. Brandt was also first with twelve plants, among which he had splendidly grown examples of *Pandanus Veitchii*, *Aralia elegantissima*, and a well coloured *dracæna*. Sir William Lawrence had such uncommon plants as *Russelia Lemoinei* and *Zephyranthes carinata*, a delightful rose-coloured zephyr flower, and a begonia with gorgeous foliage.

An especially fascinating little group of cacti was shown by Mr. Reginald Cory.

There were little plants of *Cereus senilis*, *C. Spachianus*, *Crassula punctata*, *Gasteria Bayfieldii*, *Mamillaria Parksoni* and *M. senilis*.

The orchids which won the first prize for Mr. H. T. Pitt, Rosslyn, Stamford Hill, included excellent miltonias, *lælio-cattleyas* and *odontoglossums*. Mr. A. Gentle, St. Albans, was second, and he showed *Anguloa Clowesii*, *lycastes* and *lælio-cattleyas*. In the class for six orchids, Mr. A. J. Sutton, was first with similar sorts.

Unfortunately, the remaining classes do not call for extended comment.

Gloxinias, mimulus, "any one genus of hardy plant," or British plants, were not represented, while the fuchsias and begonias were very ordinary. An exception was the six ferns in pots, where Mr. C. Henwood, Maida Vale, was first with charming specimens of *Asplenium trichomanes trogyense*, *Blechnum spicant coronans*, *Polystichum angulare nitescens* and other good examples.

## BOURNEMOUTH FLORAL FÊTE

IN ideal surroundings and in glorious summer weather, a lavish display of flowers was provided for the public in the beautiful Meyrick Park on Tuesday and Wednesday, June 30th and July 1st. There was ample room on perfectly level ground for a big show of this kind, and the pine and heather clad hilly parts on the eastern boundary afford visitors a grand view of all open-air events. On the lower western side the large clumps of rhododendrons, pines and other kinds of trees cast a welcome shade of which the crowds of visitors took full advantage.

## ROSES.

For a display of roses arranged for effect on a space 15ft. by 4ft., Mr. George Prince, Oxford, won the silver challenge cup presented by Mr. Walter Child Clark, and also the Bournemouth Corporation Cup, value 50 guineas, for the best exhibit in the competitive classes. Allan Chandler, a new pillar variety; Shot Silk, sweetly scented; Agéle Pernet, Mrs. Henry Morse, Mabel Morse, Mrs. Henry Bowles, Hadley, Queen Alexandra, Betty Uprichard, Sadie (a sport from Lady Pirrie) and William Cordes were prominent varieties. The exhibit was in the form of pillars with a groundwork of blooms in vases.

Mr. Elisha J. Hicks, Hurst, Twyford, Berkshire, was placed second, with a lovely collection in the form of pillars with a central arch and groundwork vases of blooms, including Queen Alexandra, Lady Hillingdon, Betty Uprichard, Chas. E. Shea and Mrs. Stevens, all in perfect condition. Mr. Arthur Radmore, Bournemouth, won third prize. In the class for twelve roses, distinct, on boards, Mr. George Prince won first honours. All were good, Edith Haig and Lady Barham being outstanding sorts. Messrs. F. Cant and Co., were second with blooms of Princess Victoria and Augustus Hartman. Mr. George Prince scored in the classes for five pink and five red, respectively; and Mr. Hicks in the class for five white. In another division, Mrs. A. Cook, Bournemouth, won first prizes for twelve roses, distinct, and also for six; Mr. H. Nixon was second.

## SWEET PEAS.

Mr. A. E. Usher, gardener to Sir Randolph Baker, Bt., Ranston Park, Blandford, won the silver challenge cup for the third time, with a really grand lot of blooms tastefully displayed on a space 12ft. by 4ft. Grenadier, Wild Rose, Pink Perfection, R. F. Felton, Wembley, Mammoth and Purple Perfection were outstanding where all were good.

Mr. J. Stevenson staged a really magnificent lot of sweet peas; this collection was



MESSRS. TOOGOOD'S FINE EXHIBIT OF SWEET PEAS, GLADIOLI AND IRISES.

remarkable for the richness of the colours, these being deep, clear and very pure. Guinea Gold, Golden Glory, Coraline, La France, Diana, Venus, Charming, Crimson Glow and Stevenson's Cream, a green and yellow mixture, were notable.

Messrs. Toogood and Sons, Southampton, had a beautiful group of sweet peas and irises. Of the former, Doris, Floradale Purple, Matchless, Powerscourt, Mrs. Tom Jones and Royal Scot; and of the latter, Nymph, Prince Albert, Princess Dagmar, Grand Lilas, Lucinia, Bridesmaid and General Vetter, were very fine. The local classes for sweet peas were also well filled with charming blooms, Miss Fortescue, New Milton, Hampshire, being a prominent prize-winner.

## CARNATIONS.

As with the roses and sweet peas, so with the carnations, there was a wealth of them. Messrs. Allwood Brothers staged a very fine collection in baskets and in vases. The silver cup, offered for the best exhibit in the Show, was awarded to this collection. A few of the many good varieties staged were the following: Beauty of Durham, Edward Allwood, White Pearl, Topsy (a better sort than Triumph), Laddie, Jessie

Allwood (fine yellow), Mrs. H. Stoop and Eldora.

Messrs. Stuart Low and Co. also had a fine display, notable varieties being Amos Grove, Lord Lambourne and White Pearl.

For two vases of carnations, distinct, Mrs. Wyndham Pain (gardener Mr. P. Kitcher) won first place with very fine blooms of great substance and rich in colour.

## HERBACEOUS FLOWERS.

These and rock plants were well represented. Messrs. M. Prichard and Sons had a charming group arranged in a natural manner on a space 10ft. square. *Scabiosa caucasica*, *Watsonia Ardernei*, *kniphofia*, *Lupinus Downer's Delight*, delphiniums Prichard's hybrid strain, *Iris Duchess of Abercorn*, *I. Sultan*, *I. Haknoden* (white), *I. Lady Grey* were the best.

Messrs. Skelton and Kirby also staged these plants well, *Delphiniums Danube*, *Nettie* and *Violet Gueslin*, and *Aconitum Newbury Gem* being notable.

## MISCELLANEOUS EXHIBITS.

Mr. Usher won the challenge cup for a display of fruit, flowers and vegetables on a table space 12ft. by 4ft., all the produce being high class. Messrs. T. F. Rivers,



Sawbridgeworth, were represented, as usual, by healthy, well grown specimens of cherries, peaches, nectarines, plums, oranges and figs in full fruit in pots.

Messrs. Hilliers of Winchester had a charming exhibit of water lilies, bamboos, acers,

were responsible for a rock and water garden, very natural and beautiful. Messrs. John Peed and Son, West Norwood, had a very imposing group of caladiums, crotons and gloxinias. Messrs. Leonards, Bournemouth, a unique exhibit of floral devices, cut flowers

delphiniums and violas. Mr. T. K. Ingram, Parkstone, Dorset, floral devices. Mr. G. G. Collyer, Lymington, Hants, rock and herbaceous plants, *Primula capitata*, *Campanula* G. F. Wilson and *Delphinium* Loddon Guard. Messrs. Maxwell and Beale filled a large space with choice alpine and rock plants which were well arranged.

Groups of shrubs and small specimens of conifers in pots were typical of the Evergreen Valley, as Bournemouth is called. Some of these choice shrubs and trees were exhibited by Messrs. Jeans and Trowbridge, who also won the silver challenge cup for a group of miscellaneous plants and cut flowers, arranged in a space of 200 sq. ft.—20ft. by 10ft. Graceful palms, a new zonal pelargonium—Mrs. Burt—coreopsis, blue hydrangeas, gaillardias, Canterbury bells and perennial asters were the principal plants and flowers in this group.

**Gold Medals.**—Messrs. Jarman and Co.; Messrs. Toogood and Sons (large gold); Mr. J. Stevenson; Mr. T. K. Ingram; Messrs. Allwood Brothers; Messrs. Stuart Low and Co.; Messrs. M. Prichard and Sons; Messrs. Leonards; Messrs. John Peed and Son; Messrs. Stacey and Staddon; Messrs. G. Watts and Sons; Messrs. Hillier; Messrs. T. Rivers and Son; Mr. Arthur Radmore; and Mr. W. E. Yandell.

**Silver Medals.**—Messrs. John Scott and Co.; Messrs. H. Haskins and Sons; Messrs. Skelton and Kirby; Mr. H. M. Elford; Messrs. Maxwell and Beale; Messrs. Jeans and Trowbridge; and Mr. G. G. Collyer.



MR. GEORGE PRINCE'S EXCELLENT EXHIBIT OF ROSES.

gunneras and cistus; *Cistus* Silver Pink was conspicuous. Messrs. Stacey and Staddon

and choice fruits. Messrs. Jarman and Co., Chard, centaureas, irises, roses, gladioli,

## CORRESPONDENCE

### THE COLLECTION OF ALPINES.

SIR,—To visit during the summer months, in full flowering time, a strange mountain country, rich in plants one is anxious to acquire, is a very tantalising experience for an enthusiastic gardener. During a recent motor tour through the Cantabrian Alps and across the plains of Northern Spain, I saw many plants that I would have dearly loved to cultivate, but my efforts to transfer these to England met with very little success. If any of your readers can give me any "tips" that might be useful for my future guidance, I would be deeply grateful. It is all very well to say that the best way to introduce "alpines" is by means of seed, or to gather them in the autumn and pack them with dry roots! But how many of us can recognise the plants we want at this season? And, moreover, how seldom do we visit these mountainous districts during the autumn months?

From the small success I achieved, I feel convinced that it ought to be possible to devise some kind of zinc collecting box that would greatly facilitate the safe transport of "alpines," provided sufficient care had been exercised in the first instance in lifting them from the ground. Perhaps such a box already exists; if so, I would be very glad to learn from whom it may be purchased. I should imagine this box ought to be made of zinc or tin, and be at least 2ft. 6ins. long, 6ins. broad, and about 1ft. 6ins. in depth. The sides and lid, of course, would have to be freely perforated with holes to permit ample ventilation. With two trays divided into divisions of suitable size (also perforated), such a case should enable one to carry a fair number of plants (removed with a ball of earth), under airy, moist conditions; and if the divisions were lined with Fibrex or some similar substance, they could be removed at the end of the journey without any further root disturbance.

This box is, as yet, only a child of my fancy and before putting it to a test, I would like the opinion of others who have tried (I hope

more successfully than myself), to lift and transplant "alpines" when in their full floral beauty.—COLLINGWOOD INGRAM.

### VIBURNUM BITCHIUENSE.

SIR,—I was in the garden at Hayne, Moreton Hampstead, one day last month, and was struck by what seemed a giant bush of *Viburnum Carlesii* in the distance, in full bloom. When nearer, I discovered that, though the flowers and very pinky buds were very like those of *V. Carlesii*, the leaves were different and the flowers had no scent. I was told that it must have been planted many years ago, long before *V. Carlesii* was introduced. Another large shrub in full bloom, new to me, grew near it, with small, greenish-yellow, sweet-scented flowers. I sent bits of both off at once to Mr. E. A. Bowles and asked for the names, which he sent (in great hurry) as *Viburnum Bitchiense* and *Eleagnus multiflora*, saying "the latter has pretty red fruit."—(Mrs.) LLOYD EDWARDS.

### HABIT OF VIOLAS.

SIR,—I was sorry to see on the stands of some of the viola specialists at the recent Chelsea Show so large a proportion of the purely exhibition type of the flower. So many of these exhibition sorts are of little use as border or bedding plants, owing to their straggling habit of growth. They lack the tufted character which makes certain varieties so charming even before they come into bloom.

Visitors viewing an exhibit of violas at a show such as Chelsea make a selection as their fancy dictates, often regardless as to whether the varieties selected are useful for bedding and effect in the garden, for which purposes the average person requires these plants. Enquiries as to habit and reference to catalogue are apt to be overlooked when a particular variety is fancied. If a variety of poor habit is purchased, disappointment probably results, and the purchaser is likely to conclude that violas will not do well in his garden.

It behoves raisers of new varieties of violas to be careful in their quest for new and distinct sorts that the tufted habit and free-flowering propensity are not sacrificed on the altar of size. Having regard to the habit of many of the more recently introduced varieties, it seems evident that such a state of things may occur, and it seems to me that, in some cases at least, raisers are working on the wrong lines. Even those new varieties that are not actually straggling in habit are far too rampant in their growth. I have grown most of the named varieties that have been in commerce during the last twenty years and more, and for bedding purposes and freedom of flowering many of the older sorts are, for garden embellishment at any rate, still to be preferred to a great many of the newer sorts. It is only fair to say, however, that there have been sent out within recent years a certain number of most excellent varieties, distinct "breaks" in colour and of a good habit of growth.—H. C.

### A WELL SET UP EXHIBIT.

SIR,—For some years I have been unable to attend shows, and am, therefore, the more dependent on what I see described and illustrated in the garden papers. I have always thought that in flower exhibits, and independently of the actual merit of the blooms, much depends on good arrangement. In your issue for May 23rd, among the notices of flowers at the Chelsea Show, there is an illustration of Messrs. Toogood's Spanish irises. The notice merely says that they are "well arranged," but these words do but scant justice to the quite admirable setting up of the exhibit, which certainly deserved special praise. The large central upstanding mass is perfectly balanced by the grouping of the blooms below, which swing up on either side in a way that is a model of good feeling for balance and proportion; while the back spaces on each side are just rightly filled by the slender upstanding chamærops.—G. JEKYLL.



# NOTES FROM CONTRIBUTORS

## THE DOUBLE DAISIES.

AMONG the flowers that have been very welcome this spring, particularly after the long drawn out winter, are the various forms of *Bellis perennis*.

The garden varieties of this daisy have been improved considerably during the past decade or so, and they can now be obtained in many tones of red and pink. They are all very hardy, will grow anywhere and are easily propagated by division.

Colonies of these plants interspersed among the low-growing subjects at the edge of the borders made my garden very gay for some weeks in spring. Although we are accustomed to look upon these daisies as commonplace little plants, they are well worth growing in considerable numbers to provide attractive masses of colour at a time when most needed.

Some very pleasing named varieties are *Ball of Fire*, a big flower, deep rich crimson in colour; *Dresden China*, a small flower of a delicate shade of rose pink—a charming little variety; *Shirley*, a recently introduced variety, the individual flowers of which are rather striking in appearance—it is a semi-double sort with dark crimson ray petals of considerable substance.—HOWARD H. CRANF.

## DAY LILIES.

WE can shut our eyes to the fugitive character of the day lilies—*hemerocallis*—when we recollect the output of their blossoms, and the comparatively little trouble the plants give once they have become established. They are never better served than when located near the margin of a stream, and are among the ideal plants for waterside gardening, loving moisture and, when catered for in this way, growing into beautiful clumps very soon. But it is not as waterside plants alone that they are useful, as one recognises their worth in the hardy plant border, and here they give a good account of themselves, if mulched with old manure from time to time. In July they are, with us, in full beauty, and have seldom failed through long years. *H. flava*, bright yellow; *fulva*, coppery red; *aurantica major*, orange yellow; and *disticha fl. pl.*, semi-double orange crimson; are among the best known of these old-time garden flowers.—W. LINDERS LEA.

## BRACHYGLOTTIS REPANDA.

I ENCLOSE a photograph of *Brachyglottis repanda* growing in this garden (West Porlock House, Somerset), which may interest the



A FINE BUSH OF BRACHYGLOTTIS REPANDA.

many readers of THE GARDEN. The measurements are about: Height, 6ft. 6ins.; circumference, 28ft. It was grown from a cutting struck five years ago.

It would be interesting to know if anyone has had like successful results with this composite.—G. W. W. BLATHWAYT.

## A HYBRID HEUCHERA.

THE enclosed is, I venture to think, rather a charming photograph of *Heuchera Tiarelloides*, the hybrid between a *heuchera* and *Tiarella cordifolia*, which seems to partake of the nature of both parents. I trust it may interest many readers of THE GARDEN.—R. HUDSON

## THE PURPLE CONE FLOWER.

FEW gardens of hardy flowers include among their treasures *Echinacea purpurea*, the purple cone-flower, a distinct and attractive as well as effective border plant, which would be a great acquisition to many places. It is far from being new to cultivation, but on account of a certain liability to succumb in very severe winters it has never been so popular as its attractions would justify. With regard to this remark about its being by no means a new plant, it may be pointed out that some confusion exists respecting the date of its introduction. In one work in my possession it is said to have been introduced in 1699, but in some others, generally considered reliable, it is stated as 1799. Seeing that it was figured or described in the *Botanical Magazine*, t. 2, published in March, 1786, and that reference is made there to what Miller said regarding its liability to succumb, it seems likely that the earlier date, given as 1699, is correct, although the *Botanical Magazine* gives no date itself. This point is probably of little importance to the gardener, but it would show how long this fine plant has been known in British gardens. It is frequently called *Rudbeckia purpurea*, but Britton and Brown refer to it, in the "Flora of the Northern United States and Canada," as *Brauneria purpurea*. Happily, the name of purple cone-flower is well established, although another is also applied to it in the United States, where it sometimes passes under the name of "Black Sampson," which is far from describing the flower's coloration.

The flower itself is a truly handsome one, with a distinct central cone and long, narrow petals of a good purple. It is faithfully represented

as regards colour in the old plate of the *Botanical Magazine*, which tells us that the "outermost petals *xx* are long, purple and pendulous, and not unaptly resemble small pieces of red tape." It grows



HEUCHERA TIARELLOIDES, WHICH BEARS SOME RESEMBLANCE TO BOTH ITS PARENTS.

about three feet high and blooms from July to September, and in its best forms may well be accounted one of the most striking border plants of the season. It seldom ripens seeds with us still, but seeds produce plants which vary considerably in colour, breadth, and length of the ray florets. Good forms ought to be propagated by very careful division in spring, as later division is almost certain to be fatal to the plant. Some of the good forms are sold under varietal names and one of the best known to the writer is that called the "Taplow variety," crimson-purple, for which we have been indebted to Messrs Barr and Sons. The cultivation of *E. purpurea* is not difficult in ordinary garden loam, but it ought to be well drained, and one's own experience over a long series of years has confirmed the statement made by the old authors that it is liable to be lost in winter and that a spare plant or two should be kept in a frame to replace the others should they be killed. It is unfortunate that we have no absolutely hardy form of *E. purpurea*, which comes from Carolina and Virginia.—S. ARNOTT.

## PUSCHKINIA SCILLOIDES.

A VERY useful spring-flowering bulb that is usually seen in large establishments is *Puschkinia scilloides*, sometimes named *P. libanotica*. A native of Asia Minor it has been known in this country for rather more than a hundred years and now forms a regular feature in any recognised collection of bulbs. The flowers, of which a dozen or more are borne on a spike, in a like manner to hyacinths, are of a very light blue and in some cases white colour with blue stripes. These marks or stripes are dark blue at the base, gradually shading off to a very light tone at the edges of the petals.

The flower spike attains a height of 6ins. or 7ins. and the flowering period with us is from the middle of March to the end of April.

The bulbs, which should be planted about 3ins. deep during the month of October are best left undisturbed for a period of three or four years, when they may be lifted, the young ones taken off and the whole of them allotted a fresh position. To get the best results the bulbs should be given a sunny position where the soil is light rather than heavy.—W. H., Glasgow



# SIMPLE GARDENING

## TOMATOES: TREATMENT OF SUMMER AND LATE AUTUMN CROPS.

**A** FEW years ago, when we experienced a very hot, dry summer, it was not much trouble to grow fine crops of tomatoes, even in the open air. Nearly all the fruits that set, ripened or were easily ripened after they were gathered. But we must not rely upon a similar warm autumn this year. The hot summer above referred to will be remembered as one favourable to the white fly, too. With reference to this pest I would urge amateurs, especially those who are growing tomatoes for the first time, to make good use of the remedies as supplied by advertisers in *THE GARDEN*. The tiny grubs are hatching out every day, and the remedies should be applied at least twice a week for a month or so till all flies are destroyed. When the plants have set several trusses of fruits, it frequently happens that the top trusses of flowers fail to set. This condition is caused by lack of strength of plant and frequently, too, through overdryness of the soil. While in full growth tomato plants require plenty of water, also top-dressings of rich lumpy turves and manure. Retain the leaves near the base in a healthy state as long as possible. It may be that a late autumn crop is desired. I always put out during July a batch of plants with this object in view, and select for them a nice sunny position near the glass. The plants may be finally planted in the border in large pots or boxes. When three trusses of fruits have set, remove the others, as the three will be burden enough for each plant.

## PINKS AND CARNATIONS.

The pink is hardier than the carnation, it flowers early in the summer, forms dense masses in borders and is effective as an edging to a border. When the flowers have faded the silvery foliage is beautiful and retains this beauty and compact habit all through the year. The fragrance of the pink is rarely excelled by any other flower grown as a border plant. Divide the old plants or insert cuttings—pipings—to increase the stock. The present is a suitable time for the insertion of cuttings. Before any are taken from the parent plants see to the preparation of the border for their reception. This border should be in the open air, on the north side of a wall, low or of medium height; a narrow border in preference to one very wide. Dig the soil deeply and, if available, add some old potting soil to it, firm the ground and cover the surface with sand nearly in. deep, gritty, not fine and floury. As the cuttings are taken place them direct in a pail of water. The basal shoots are the best. Remove the three lower leaves, cut off square below a joint and insert at once, 2 ins. apart in rows, water through a fine-rosed watering-can, shade or, better still, cover temporarily with a garden frame. Border carnations should be layered as the basal shoots become

available. First clear away all faded leaves and any weeds. Use as a compost, loam two-thirds, leaf-soil and sand one-third. Pack this compost close under the old plant. With a sharp knife cut, slant-wise, half through the stem. Bury the latter in the new soil and peg it firmly there. The chief after-attention is watering.

## SOME CHRYSANTHEMUM PESTS.

Cultivators of these plants who wish to have in due course exhibition blooms will now anxiously watch the shoots that are to bear the flowers. There are several kinds of pests that destroy leaves and tender shoots. The leaf-mining grub is very troublesome this year. Watch the plants closely and directly any white specks and streaks



are observed in the leaves press the specks—which are grubs of the leaf-miner fly—between the thumb and finger. The letter *a* shows the sound leaf and *b, b, b*, grubs. Syringe the ashes round the pots with a paraffin emulsion and the foliage with clear, weak soot water every week to make the surroundings unpleasant for the fly. Green and black aphides infest the shoots as seen at *c*. Use tobacco powder in the evening and syringe it off early the following morning. While closely watching the plants note any suckers growing at the base, *d, d*, and remove them without injuring the roots of the plants. Do this till the middle of October. The cuckoo-spit or froth hopper is very prevalent this year, too. It surrounds itself with froth—the juices of the plant. The leaves, as shown at *g*, are deformed, and later on the shoots are eaten, shown at *e, e*, by the froth

hopper or frog hopper, *f, f*. It is called the jumper, too. Destroy the larvæ now and, later, the jumpers by hand. These jumpers have broad heads and resemble frogs. If readers see little various-coloured, crocodile-like insects or grubs similar to the one shown at *h* on the shoots, retain them. They are the larva of the ladybird, a friendly insect which destroys aphides.

## VEGETABLE MARROWS AND CUCUMBERS

I am now referring to vegetable marrows and cucumbers in the open air and also to cucumbers in cold frames. It is not always easy to succeed with these plants, and very difficult indeed in the case of marrows where the plants are growing on heaps of littery manure. There are two extremes to avoid, namely, the high, dry bed and the one under the spreading branches of large trees. In both cases there will be yellow embryo fruits and loss of crops. Where the plants are growing on the high, dry beds, improve the conditions by liberally top-dressing with good rich loam mixed with rotted manure. Where the plants are in much shade, train the shoots very thinly, stop the laterals one joint beyond the one bearing marrows and fertilise the young fruits daily. Cucumbers in open beds require very similar treatment, but the plants under glass must be watched closely, taking care that all tiny, useless shoots and fading leaves are regularly removed and strong side shoots bearing young fruits as regularly stopped to prevent undue crowding. Twice every day the plants should be well syringed, thoroughly wetting the under part of each leaf, or else the whole plant will be ruined by red spider in one week without hope of recovery.

## EARLY CABBAGES AND ONIONS IN NORTHERN COUNTIES.

Where both kinds of vegetables are concerned, it is advisable to make two sowings of seeds, one about July 20th and the other about August 5th, in northern counties. Generally a small sowing in each case will be sufficient, and the resultant plants will be of more value than those from one big sowing made either early or late. In the meantime we must prepare the ground for these crops as long as possible beforehand. A very rich soil is not suitable, nor is a very poor one. The latter should be enriched with rotted manure if such is available. Of course, the border in which the seeds are sown will be a small one, and it should be in the open quarter, not sheltered by trees or buildings. Here, too, the soil should be deeply dug and well prepared, old lime rubble being mixed with it. The onions may be sown in the permanent bed—the one in which the bulbs are to mature—the surplus plants being drawn carefully and replanted early in October. The cabbages, too, should be planted in their permanent quarters between the middle of September and the same time in October, when the ground is in good condition.

GEORGE GARNER.





## Banish White Fly

Snow Fly on Tomatoes and Cucumbers can easily and safely be eradicated by means of Abol White Fly Compound. No apparatus needed. Simply pour the Compound down the centre path of the House at the rate of 2½ fluid ozs. to 1,000 cubic feet of space.

Sold in round tins as under. When reckoning quantity required allow ½-pint for each 2,000 cubic feet.

Size	Price	Postage
½-pint	1/-	6d.
¾-pint	1/9	6d.
Pint	3/-	9d.
Quart	5/-	9d.
½-gallon	8/-	1/3
Gallon	15/-	2/6

Of all Nurserymen, Seedsmen, Florists, Ironmongers, Chemists and Stores. Abol Limited, 9, Beltring, Paddock Wood, Kent.

Write for descriptive Folder.

**Abol**  
**White Fly Compound**

Please mention THE GARDEN when writing.



## Don't Waste Your GARDEN RUBBISH!

**THE ADCO PROCESS**  
(Patented in the United Kingdom and Abroad)  
WILL TURN IT INTO

## SYNTHETIC FARMYARD MANURE

ADCO is your garden's "Crop Insurance Policy." It maintains soil fertility at a "low premium" by guaranteeing a supply of organic fertiliser. As refuse accumulates treat it with

### ADCO ACCELERATOR

If at least half consists of soft green materials such as lawn cuttings, cabbage leaves or green weeds; but when dead leaves, vegetable stalks, herbaceous border cuttings, prunings, straw and straw packing, form the bulk of the heap, use **Standard ADCO**.

If your dealer does not stock ADCO write direct to us, mentioning his name and nearest Goods Station. 1 cwt. of ADCO makes from two to three tons of manure according to the class of rubbish treated.

ADCO Accelerator .. 28 lb. 4/6, 56 lb. 8/6, 1 cwt. 15/-  
Standard ADCO .. 28 lb. 6/- 56 lb. 11/6 1 cwt. 20/-  
Carriage paid to nearest station. Cash with order.

**ADCO Ltd.,** 40 HARPENDEN, HERTS



# REAMSBOTTOM'S ANEMONES

Gold Medal St. Brigid

(None Genuine without our Gold Medal Seal.)

12, 3/-; 25, 5/6; 50, 9/6; 100, 18/-

Plant now for bloom from late Summer onwards throughout Autumn and Winter.

Miss Campbell, Harewood, Seaton, Feb. 21st, 1925 writes:—"The St. Brigid Anemones I had from you (MAY, 1924) were VERY beautiful and are in bloom now."

Please write for Current Price List of Choicest Flowers for planting now.

PLEASE MENTION "THE GARDEN" WHEN WRITING.

**REAMSBOTTOM & CO.,** TOWER NURSERIES,  
WEST DRAYTON, MIDDLESEX.

## LINE and COLOUR

are as important in a garden as they are in a painting

## THE PLANNING AND PLANTING OF LITTLE GARDENS

By **GEORGE DILLISTONE**

With notes and criticisms by Sir L. Weaver. 129 plates. 6/- net. By post 6/6

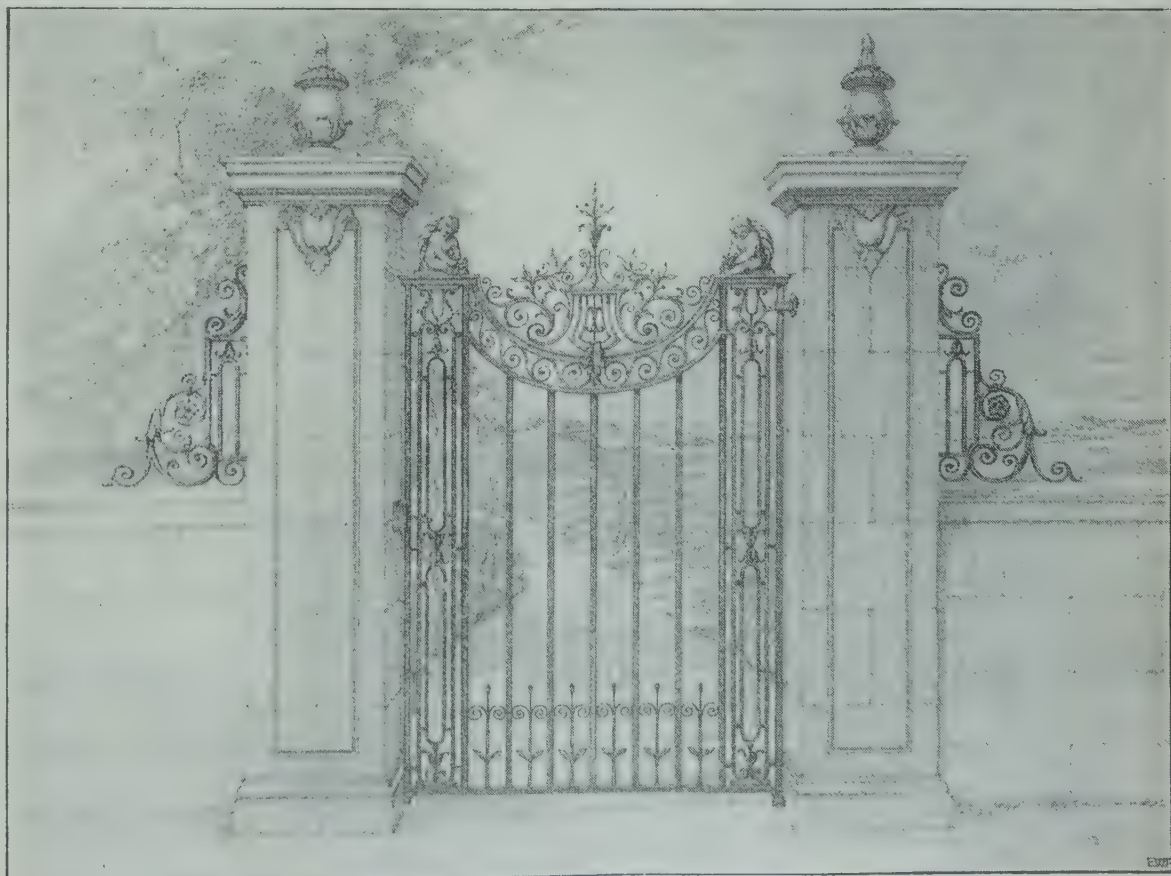
## WALL AND WATER GARDENS

By **GERTRUDE JEKYLL**

With chapters on Rock Gardens, Heath and Paved Water Gardens.

200 illustrations. 17/6 net. By post 18/3

These books may be seen at our Showrooms, or prospectuses will be sent on application to "COUNTRY LIFE," 20, Tavistock Street, Covent Garden, London, W.C.2



**HILL & SMITH LTD BRIERLEY HILL STAFFS**  
Craftsmen in Metals

London.  
8 Victoria St Westminster S.W.

Manchester.  
8 Exchange St

Please mention THE GARDEN when writing



## NORFOLK & NORWICH FLOWER SHOW

THIS event was held on June 25th in the grounds of Mrs. A. Chamberlin, Norwich. The weather was not favourable and we fear the committee will be faced with a deficit. This is especially unfortunate as the Society had an even worse experience last year. There was a very good show of roses, every class being contested and the blooms from many exhibitors were of splendid quality. The class for thirty-six distinct blooms was won by Frank Cant and Co., and although many of the newer types were staged, we noticed such old kinds as Mildred Grant and Horace Vernet were still worthy of inclusion. For twelve new roses, Frank Cant and Co. and Messrs. A. J. and C. Allen, Norwich, were close competitors, the awards being given in the order named. Messrs. Allen, however, distinguished themselves in an arrangement of roses on a 5ft. run of the show board.

The National Rose Society's medal for the best tea or noisette, was secured by Mrs. Campbell Steward of Saxlingham, with a grand specimen of Mrs. Foley Hobbs, and that for any other than a tea rose by Mr. G. E. Deacon, Hethersett, with a large bold bloom of H. V. Machin.

Sweet peas were not so numerously represented as we have seen them, the cold, damp spell of the week previous to the Show no doubt accounting for the shortage. The premier award for these went to Mr. C. H. Walter, Drayton, Norwich, who staged an up-to-date collection of twenty-four varieties and although the stems were not so long as one sees sometimes, the gardener, Mr. H. Reynolds, had effectually displayed them. Hardy perennials seemed backward, the best collection coming from Mr. H. W. Empson. Lilies and irises were extra well shown by Mr. J. A. Christie, M.P., Framingham Manor. The popularity of delphiniums was evidenced by the large display of these, the premier spikes were set up by the Norwich Corporation Parks Department. Stocks, water lilies, begonias (double tuberous-rooted) and flowering shrubs were all admirably shown by Mr. J. E. Moxey, Framingham Hall.

Fruit was represented by fine peaches (from Mr. J. E. Moxey), melons (from Miss McLintock, Catton), cherries, and a fine display of strawberries.

Vegetables were well up to the average in quality, the best collection was put up by Mr. Bentley, gardener to Mrs. Barker-Haklo, Langley Park, and great praise was due to Mr. J. Ulph, gardener to Mr. J. E. Moxey, for his exhibit of salads. The allotment holders, who are specially catered for in the schedule, had also made a good vegetable display.

The trade growers did much to add interest to the Show. Messrs. Daniels Bros. (Norwich) had a fine mixed exhibit; Messrs. A. J. and C. Allen (Norwich), exhibited roses in wonderful array, securing the premier gold medal. Messrs. A. Reeves and Co. (Catton) had a bold bank of roses; Mr. R. Winder (Lingwood) staged roses in baskets and vases; Henry Morse and Son (Eaton and Brundall) had a pretty display of the newest roses, including a new seedling of their own named Cinderella; Messrs. Stock and Son, Fakenham, had a blaze of colour with peas, poppies, campanulas and scabious; Messrs. Lowe and Gibson (Crawley) made a feature of delphiniums; while Millers, Wisbech, had a most interesting group of herbaceous flowers and shrubs.

The president this year is Sir Bartle T. Frere, and the secretarial duties were in the hands of Captain Sandys Winsch. H. P.

## TRADE NOTE.

**"Kil-Jac": A Remedy for Leather-jacket Grubs.**—This year these grubs have done a great deal of damage, especially to lawns and tennis courts in all parts of the country. In spring I tested some "Kil-Jac" on several lawns. It is manufactured by Messrs. James Carter and Co., Rayne's Park, London. Where applied the grass has remained green and healthy, parts not dressed have many brown patches, just as if the grass had been scorched; the grubs eat the roots just below the surface and, of course, the young plants die and do not grow again freely, as is the case when a spell of hot, dry weather passes. Broods are hatched out in autumn and spring, mainly, and it is at these times that the "Kil-Jac" should be carefully applied. The grubs come to the surface during the night, so the evening is the best time to apply the remedy, which is in the form of a dark-brown powder. In both spring and autumn it may be dug into the soil in strict proportions, according to the particulars supplied with the mixture. Like so many more garden lovers, I am troubled with ants and woodlice, so I tried the effect of the "Kil-Jac" on them. Where it was possible to confine the woodlice in a small space the powder soon killed them, the ants, being more active, could not be killed in this way, but they were driven away from their nests and the grubs were easily destroyed. But it is as a remedy for the grubs of the leather-jacket that "Kil-Jac" is such a boon.

## ANSWER TO CORRESPONDENT

**Splitting of Grapes.** (Regular Reader).—This is caused by incorrect cultural treatment. The removal of too much foliage and excessive watering after a dry period are the chief causes of this condition of the berries. Although the removal of unwanted shoots and the stopping of laterals are necessary, the latter operation should not be carried out too severely. The bunches need a certain amount of shade which can be given by the leaves. The borders should not be allowed to become dry. A border tester should be used and their condition examined. During the swelling period particularly, liberal supplies of water are necessary. If the borders have become dry, and are given a large supply of water, the berries are very liable to split. The plant you ask us to name is *Crassula coccinea*.

**The National Carnation Society.**—On Thursday next, July 16th, the National Carnation and Picotee Society will hold an exhibition of border carnations and picotees at the Carpenters' Hall, Throgmorton Avenue, E.C. The show will be opened by the Lady Mayoress at 12 noon. As this is the first show of its kind to be held in the City, it is almost certain that it will stimulate the interest and enthusiasm of all carnation lovers, who should make a point of being present. This exhibition is in addition to the ordinary show of the Society, which will be held in conjunction with the next R.H.S. meeting on July 14th.

**Gardening Appointment at Wisley.**—Mr. R. Finlay, Superintendent of Greenwich Park, has been appointed by the Council of the Royal Horticultural Society to the Keepership of the Wisley Garden. We offer our congratulations to Mr. Finlay on his new charge.

**A New House at the Royal Botanic Gardens, Kew.**—We would like to draw our readers' attention to a new house which has been recently opened at Kew Gardens for the display of plants of botanical and educational interest. The special display which is now being made consists of calceolarias, namely, *C. cana* and the various hybrids

which have resulted from crossing *C. cana* with *C. herbacea* and other species. *C. cana* is a small, hoary-leaved species from Chile, with violet-scented flowers, and the hybrids which have resulted from it have the hoary leaves of *C. cana*, while the flowers show a wide range of colours, from white, through yellow to a deep purple red. Other species represented are *C. angustifolia*, *C. amplexicaulis*, *C. dentatus*, *C. integrifolia*, *C. Pavoni*, *C. corymbosa* and *C. virgata*. The South American calceolarias have the characteristic pouched flowers, but there are four exceptional species which have opened helmet-shaped flowers, two of which occur in South America, *C. violacea* and *C. punctata*, and two in New Zealand, *C. Sinclairii* and *C. repens*. Plants of *C. violacea* and *C. Sinclairii* are exhibited in this house. An exhibit of petunias is also to be seen in the house, showing the development of the garden petunia from the two wild species from the Argentine and Uruguay, namely *P. integrifolia* (syn. *P. violacea*), and *P. nyctaginiflora*. Specimens of the two wild species are shown in this house, with one of the earliest garden hybrids having beautiful pink flowers, and modern garden derivatives with pink, deep purple and white flowers. An interesting new South African composite, *Venidium Wyleyi*, is also exhibited, which was raised at Kew from seed received from Miss Wilman of Kimberley, the well known South African botanist. The exhibits will be changed from time to time and should prove a source of interest to all gardeners, both professionals and amateurs.

**German Rose Show at Mainz.**—In connection with the Rhenish Festival week, from July 11th to 19th, there will be a large and extensive rose show laid out in the town park, which should prove a source of great attraction to all rose lovers. The rosary is situated in the upper part of the park and about 18,000 roses will be planted there in beds. All the best novelties and selected sorts will be represented. One part of the rosary will be laid out in three terraces, with fountains and pergolas. Further information regarding travelling and residence will be readily given on application to the Verkehrsbureau, Mayence, Bahnhofstrasse 7.

## YORK FLOWER SHOW.

In our report of the York Flower Show the names of two prominent exhibitors were, unfortunately, omitted. Messrs. Kelways staged a large exhibit of their well known varieties of peonies, which was awarded a gold medal, while Messrs. Webbs, also received a gold medal for the only trade exhibit of flowering plants raised from seed. This exhibit consisted of calceolarias, cinerarias, schizanthus, gloxinias, etc. We regret that this omission occurred.

## PUBLICATIONS RECEIVED.

"Gladioli," by A. J. Macself, published by Messrs. Thornton Butterworth, Limited, price 6s. net. This is a comprehensive work which deals with all phases of the culture and garden value of the many species and varieties which go to form this useful genus. Everything essential to the grower, both amateur and professional, is included and the cultivator will find the work of great value as the subject is presented in a style which is both simple and lucid.

"Fifty Famous Farmers," by Lester S. Ivins and A. E. Winship. (Macmillan Co., New York.)

"Pecan Growing," by Stuckley and Kyle. (Macmillan Co., New York.) (Rural Science Series, edited by L. H. Bailey.)

"Cut Flowers for Market," by F. J. Fletcher. Published by Ernest Benn, Limited, 8, Bouverie Street, E.C.4., price 2s. 6d. net.



# THE GARDEN.

Britain's Great Cabbage.

**WEBBS' EMPEROR CABBAGE.**

The most popular Spring Cabbage. Earliest and best in cultivation. Remarkably free from any tendency to "bolt." Awarded Thousands of Prizes. 6d. and 1/- per packet; 1/9 per ounce.

"Your Emperor Cabbage was remarked upon by many visitors, not one bolting out of 2,500 plants."—Mr. S. J. Craze, Foxlease Park Gardens.

List of Vegetable and Flower Seeds for Summer and Autumn Sowing—Post Free.

WEBB & SONS, LTD., THE KING'S SEEDSMEN, STOURBRIDGE.

**WATERER'S GOLD MEDAL RHODODENDRONS**

and Azaleas, Rare Hardy Shrubs, Alpine and Perennial Plants, Vegetable and Flower Seeds, Strawberry Plants in pots and open ground runners. Catalogues free.—JOHN WATERER, SONS & CRISP, LTD., Twyford, Berks; Bagshot, Surrey; and London.

**WAKELEY'S PATENTED HOP MANURE.**

—The original and only substitute for Stable Manure. See advert. on back cover.

**WM. DUNCAN TUCKER & SONS, LTD.,**

Lawrence Road, South Tottenham, N.15.—Conservatories, Winter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**BIRDS' BATHS, GARDEN VASES, SUN-**

dials, NESTING BOXES. Catalogue (No. 4) free.—MOORTON, 60, Buckingham Palace Road, S.W.

**WELLS' CATALOGUE OF CHRYSANTHE-**

MUMS now ready, and will be sent post free on application.—J. WELLS AND CO., Merstham, Surrey.

**DEFY THE BIRDS.**—Rotless Tanned

NETTING. Small Mesh. As supplied by us to the Royal Gardens. In two qualities. 50yds. by 1yd., 4/-, 6/9; 2yds., 4/-, 13/6; 3yds., 12/-, 20/3; 4yds., 16/-, 27/-; 25yds. by 8yds., 16/-, 27/-. Any size supplied. Carriage paid; approval. Cheaper qualities, 3/6 50 yds., measured mesh closed.

**WIRE NETTING.**—From 2/10 per 50yd. roll.

Cheapest House in the Kingdom. Write us for prices. Thousands of rolls stocked. Raffia, 7d. lb., postage extra.

**GARDEN HOSE.**— $\frac{1}{2}$ in. by 1-ply., 60ft., 17/6.

Carriage Paid. All sizes supplied.

**TENNIS BOUNDARY NETTING.**—Lines top

and bottom, 25yds. by 2yds., 16/3; 3yds., 18/3; 4yds., 25/3. Carriage paid; approval. Standards for fixing to, also playing nets, poles and all requisites supplied.

**LAWN MOWERS.**—Sale, 5 Riveted Blades,

high wheels, brass bushings, close cutting, highly finished, unequalled value, 8in., 20/9; 10in., 22/6; 12in., 25/-. Approval.

**TENTS.**—Army Bell, All Complete, New

ittings, Deep Walls from 55/-. Scout Tents, 24.6. Garden, Bathing, and all kinds of Tents and Marquees supplied.

**BAMBOO CANES.**—3ft., 7d. per doz.; 4/-

per 100, postage 9d. Quantities cheaper. Deck Chairs, 3/9.—J. B. HAWTHORN, LIMITED, Dept. E., Shrewsbury.

**LAXTON'S STRAWBERRIES AND FRUIT**

TREES.—Our Novelty List for 1925 is now issued, and contains new Apples, Raspberries, Currants, Strawberries, etc. All Garden Lovers should have this. Post Free.—LAXTON BROTHERS, Nurseries, Bedford.

**FENCING.**—Chestnut Pale Fencing and

Garden Screening. Illustrated Catalogue on request.—THE STANLEY UNDERWOOD CO., LIMITED, 48, Shottermill, Haslemere, Surrey.

**RARE AND CHOICE DAFFODILS.**—Our

list of fine New Seedlings, cultivated on our disease-free ground, now ready, and will be sent, post free, to applicants.—HERBERT CHAPMAN, LIMITED, Rotherside Gardens, Rye, Sussex.

**IKKIM - HIMALAYAN ORCHIDS.**—12

different grand-flowering sorts, 25/-; 6 different Cymbidiums, 1/-; 6 Renanthera imschootiana, 25/-. Post free in U.K. Catalogue free.—THE CHANDRA NURSERY, P.O. Rhencok, Ikkim (Bengal), British India.

**BARR'S SEEDS FOR JULY SOWING.**—

HARDY PERENNIALS and ALPINES for the FLOWER and ROCK GARDEN and the most suitable VEGETABLE SEEDS for Summer sowing. Finest Selected Strains and Tested Growth. Special Lists Free.—BARR & SONS, 11, 12 and 13, King Street, Covent Garden, London, W.C.2.

**IRON AND WIRE FENCING FOR GAR-**

DENS.—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—BOULTON AND PAUL, LIMITED, Norwich.

**HOSEPIPE FOR GROWERS !!!**—Great

purchase of manufacturers stock results in very low price for quality hose; samples free with list, 300 bargains. Everything on approval. Don't delay.—GREENS, Dept. 95, Lytham.

**FRUIT STORING STAND (PAT.).**—Large

storage, small space, easy inspection, sound construction. Price List of Stand, also Cloches, free.—CHASE CONTINUOUS CLOCHE (7), Chertsey.

**CONTENTS.**

	PAGE
Frontispiece. <i>Irises and Nepeta</i> .. ..	401
<i>Irises for the Small Garden. (Illustrated)</i>	402
<i>Iris sibirica and its Allies. (Illustrated)</i>	404
<i>Irises and Lupins. (Illustrated)</i> .. ..	405
<i>Creeping Plants in the Garden. (Illustrated)</i>	405
<i>Diseases and Pests of Vegetables—I. (Illustrated)</i> .. ..	408
<i>More About the Summer Rose Show</i> ..	409
<i>The Provincial Show at Bath. (Illustrated)</i>	411
<i>Simple Gardening. (Illustrated)</i> .. ..	412

**LOOK ! TANNED GARDEN NETS.**—All

orders despatched same day. 25yds. by 1yd, 2/-; 25 by 2, 4/-; 25 by 3, 6/-. All carriage paid. Any size supplied. Also Tennis Boundary Nets.—MOORE AND CO., Net Works, Rye.

**FRUIT GROWING LAND.**—HEWITT & GATER,

Auctioneers, Southampton, are offering, on July 27th, 1925, upwards of 120 acres (in convenient lots) of the finest early fruit growing land at Sarisbury Green, midway between Southampton and Portsmouth, in the centre of the Hampshire fruit growing district, together with an attractive small residence and two very superior cottages. All the land and houses are freehold and vacant. Particulars and plans ready.

**MANURES.**—The most complete little book

on the subject is "The Manual of Manures," by H. VENDELMANS. 4/5; by post, 4/9. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**GARDEN NETS.**—Tanned small mesh for

Seeds and Strawberry protection; 30 yds. long, 2 yds. wide, 4/-; 30 by 3, 7s.; 30 by 4, 8/-; 30 by 5, 11/-; 30 by 6, 14s.—Odd pieces of Netting for Bush work, 4/- bundle; all carr. paid.—H. ROBINSON, Net Works, Rye.

**BARGAINS IN GARDEN WIRE, ETC. !!**

Government paid twenty times our price. Ideal for training Peas, Tomatoes, Fruit Trees, Arches, Logans, Beans, Hops, Greenhouses, Pergolas, Chrysanthus, Tying, Fencing, etc. Steel-stranded, waterproof covered, durable. 19/6 mile (full 1,760yds.). Small lots quoted. Get free Samples and list 300 bargains. Postcard to-day!—GREEN'S GOVERNMENT STORES, 213, Albert Street, Lytham.

**IMPROVE YOUR GARDEN** by the use of

solid Oak Trellis Screens; they are ideal for growing creepers of all kinds and for securing privacy, at the same time adding an artistic feature that will last a lifetime (being pickled in preservative). No trouble to erect (being made in sections). Send for lists and get an estimate from W. T. REVITT, Railway Works, Olney.

**THE CULTURE OF CHRYSANTHEMUMS.**

By W. WELLS, 2/6 net; cloth, 3/6 net; by post 6d. extra.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

**SUTTON'S CABBAGES.**

The best varieties for spring cutting are:

Sutton's Harbinger .. .. per packet, 1/- and 1/6  
Sutton's April .. .. per packet, 1/- and 1/6  
Sutton's Flower of Spring .. .. per packet, 1/-; oz., 1/6

"I have never grown such lovely Cabbages as I have this Spring from your Harbinger seed. Of 5,000 plants not one bolted. I can strongly recommend Harbinger as the finest, Cabbage in cultivation for Autumn sowing."—Mr. J. Parki ns North Hill.

SUTTON & SONS, THE KING'S SEEDSMEN, READING.

**DOBBIE'S PLANT CATALOGUE** now ready.

Free to all readers. Please mention THE GARDEN when writing.—DOBBIE AND CO., LIMITED, Edinburgh.

**CHEAP GOVERNMENT WIRE !!!**—Great

for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—GREEN'S GOVERNMENT STORES, 69, Albert Street, Lytham.

**GARDEN NETTING.**—Best selected, small

mesh, tanned 25 by 4yds., 8/-; or 8yds., 16/-. Carriage paid. Tennis Nets and Standards. List free.—STRAWBERRY NETTING CO., 5, Suffolk Terrace, Lowestoft.

**FULL OF WISE SAWS AND MODERN**

instances our catalogue offers all that is brightest and best for the present day garden. The choice plant at Sixpence a time may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—FEILDEN AND CROUCH, 2, Fairseat Nurseries, Wrotham, Kent.

**NEW ZEALAND PLANTS** for Seaside

Gardens.—Pittosporum nigrescens for hedges, pot grown plants for planting now, 18/- per doz. Olearia Macrodonia, 1 $\frac{1}{2}$ ft., 12/- doz., splendid for hedges. Olearia Haasti, 1ft., 12/- per doz. Brachyglottis repanda, 2/6 and 3/6 each. Clematis indivisa, 2/6 each. Ozothamnus 2/6 each. Muehlenbeckia complexa, 1/6 each.—TRESEDER AND CO., The Nurseries, Truro.

**SEWAGE DISPOSAL FOR COUNTRY**

HOUSES.—No emptying of cesspools; a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—WILLIAM BEATTIE, 8, Lower Grosvenor Place, Westminster.

**PRIMULA AND ALPINE SEEDS** from

choice (1,500 collection). Rare Seedlings and Rockery Bulbs Lists free.—REV. J. F. ANDERSON, Glenn Hall, Leicester.

**GARDEN NETS,** tanned, small mesh, for

Peas, Seeds, and Strawberry protection. 30yds. long, 2yds. wide, 4/6; 30yds. by 3yds., 7/-; 30yds. by 4yds., 9/-; 30yds. by 5yds., 11/6; 30yds. by 6yds., 14/- Carr. paid.—ALFRED ROBINSON, Garden Net Works, Rye.

**JAMES BACKHOUSE, F.L.S., F.R.H.S.,** for

many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to CAER FEGLA, Arthog, North Wales.

**WATER LILIES.** — **WATER LILIES.**

Write for Catalogue. Eighty different varieties listed, in a wonderful range of colours. Other Aquatics and Bog Plants a speciality. Advice given free.—G. REUTHE, Keston Nurseries, Kent.

**THE WELSH BULB FIELDS** were awarded

the Gold Medal at the Dutch International Show last April.—A list of Daffodils, Tulips, and other Bulbs will be sent on application to the Secretary, THE WELSH BULB FIELDS, St. Asaph.

**MIXED DAFFODILS,** good varieties, 4/- per

100, new.—CRADDOCK, Cullompton, Devon.

**GREENHOUSE PAINTING AND GLAZING.**

—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7lb. tins, 4/-, pos (free); 14lb. tins, 5/6 each, carriage extra, tins free.—Full particulars from W. CARSON AND SONS, Grove Works, Battersea, S.W.11.



"Wherefore praise we famous men . . . ."

FOSTER, HORT, YELD, BLISS, DYKES, STURTEVANT, DENIS, MILLET, VILMORIN

To these especially we owe the evolution of—

## THE FAMOUS ORPINGTON IRISES

comprising all the best varieties and novelties  
of Modern Bearded Irises in cultivation

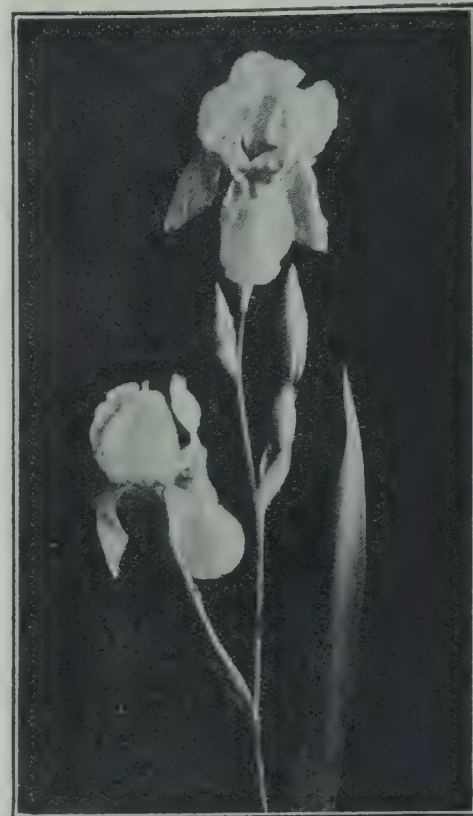
Awarded the **GOLD MEDAL** of The Royal Horticultural Society, 1925

Our New Catalogue will contain full descriptions  
of the varieties in our great collection, including  
the principal Continental and American intro-  
ductions, as well as the latest novelties of  
leading English Hybridists

Indispensable to every lover of Irises.

Write to-day for a copy.

— THE —  
**ORPINGTON NURSERIES CO.,**  
ORPINGTON — KENT



### Banish White Fly

Snow Fly on Tomatoes and Cucumbers can easily and safely be eradicated by means of Abol White Fly Compound. No apparatus needed. Simply pour the Compound down the centre path of the House at the rate of  $2\frac{1}{2}$  fluid ozs. to 1,000 cubic feet of space.

Sold in round tins as under. When reckoning quantity required allow  $\frac{1}{4}$ -pint for each 2,000 cubic feet.

Size	Price	Postage
$\frac{1}{4}$ -pint	1/-	6d.
$\frac{1}{2}$ -pin	1/9	6d.
Pint	3/-	9d.
Quart	5/-	9d.
$\frac{1}{2}$ -gallon	8/-	1/3
Gallon	15/-	2/6

Of all Nurserymen, Seedsmen, Florists, Ironmongers, Chemists and Stores. Abol Limited, 9, Beltrig, Paddock Wood, Kent.

Write for descriptive Folder.

**Abol**  
**White Fly Compound**

THE  
BRITON FERRY  
CHEMICAL AND  
MANURE CO.,  
LTD., Briton Ferry,  
South Wales.  
(Estab. 1886)

### FOR ROSE ENTHUSIASTS.

## Roses, and How to Excel With Them

By R. V. GIFFARD WOOLLEY.

Illustrated. 2/6. Cloth 3/6.

"COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, London, W.C.2.



Send for new  
booklet giving  
prices and  
advice.

## Dense, Green and Velvety

YOUR lawn will be the "apple of your eye" if you use now the famous "Ferry" Brand of Lawn Sand, and continue its use occasionally the whole year.

It destroys all weeds and acts as a fertiliser to the grass. It gives you a perfect stretch of Lawn. Non-poisonous, therefore safe to handle.

7 lbs., 3/-; 14 lbs. 5/6; 28 lbs. 9/6; 56 lbs., 17/-; 1 cwt., 28/-  
Carriage paid for cash with order to your nearest Railway Station in England or Wales.



Reg'd

Trade  
Mark.

**LAWN  
SAND**

"Try 'Ferry' First."



# Barr's Irises for July to September Planting

AWARDED GOLD MEDAL AT THE ROYAL HORTICULTURAL SOCIETY'S GREAT IRIS CONFERENCE.

The Iris is the "Orchid" of the flower garden, its blossoms being the most rich and varied in colour of all hardy plants. It should be extensively planted in flower and shrubby borders and wild gardens. When established, the plants yield a great quantity of bloom.

## BARR'S COLLECTIONS OF TALL FLAG IRISES (May and June Flowering)

3 each of 100 beautiful named varieties	..	..	£10 10s.
3 " 50 " " "	..	..	£5 5s.
3 " 25 " " "	..	..	£2 15s.
3 " 12 " " "	..	..	24/- & 36/-
3 " 6 " " "	..	..	12/- & 18/-

## SELECTIONS FOR EXTENSIVE PLANTINGS

1,000 in 50 superb named varieties from all sections, £25, £35, and £45

MIXTURES OF TALL BEARDED IRISES (without names)	Per 100.	Per doz.
	s. d.	s. d.
Choice mixed, from all sections ..	30 0	4 0
Mixed May-flowering varieties, chiefly purple and violet shades ..	35 0	5 0
Mixed Plicata and Amœna varieties, in shades of white and blue ..	40 0	5 6
Mixed Neglecta and Pallida varieties, blue, mauve, and violet shades ..	40 0	5 6
Mixed Squalens, beautiful shades of blue, mauve, purple, rose, etc., shot more or less with gold or bronze ..	45 0	6 0
Mixed Variegata varieties, in shades of yellow and gold ..	50 0	7 0

## BARR'S COLLECTIONS OF DWARF BEARDED CRIMEAN IRISES.

(Flowering during March, April, and May)

These beautiful Irises flower from March to May (before the Tall Flag Irises) and are therefore specially valuable in maintaining a succession of bloom from early spring. Being of dwarf growth they are suitable for planting in front of the taller growing Flag Irises. They are also valuable as permanent edgings to flower borders and are charming subjects in the rock garden and for old walls.

3 each of 25 beautiful named varieties	..	..	35/- & 45/-
3 " 12 " " "	..	..	15/- & 21/-
3 " 6 " " "	..	..	7/6 & 10/6

Mixed Dwarf Crimean Irises (without names), 30/- per 100; 4/- per doz.

FOR FULL DESCRIPTIONS SEE BARR'S HARDY PLANT CATALOGUE (FREE).

For the best Bulbous Irises, including Early Giant Xiphium, Spanish, English, and many beautiful species, see Barr's Autumn Bulb Catalogue, free on application.

TALL BEARDED FLAG IRISES.

**BARR & SONS, 11, 12 & 13, King Street, Covent Garden, London, W.C.2**  
AND THE NURSERIES, TAPLOW, BUCKS.

# BLOM for BULBS

*HYACINTHS for December and Christmas*  
*.. flowering ready for despatch NOW ..*

Apply for Catalogue to Messrs. J. C. WHITNEY & Co., Eldon Street House, Eldon Street, London, E.C., or to WALTER BLOM & SON (late of Overveen), Hillegom, Holland.

**ANTHONY C. VAN DER SCHOOT, LTD.,**

**Hillegom, Holland.** ESTABLISHED 1830.



Registered  
Trade Mark

**BULBS FOR AUTUMN PLANTING, ROSES, PERENNIALS**

Richly illustrated and fully descriptive catalogue  
will be mailed free on application.

**CARRIAGE PAID TO DESTINATION.**

**NO CHARGE FOR PACKING.**

Please mention THE GARDEN when writing



# REAMSBOTTOM'S ANEMONES

Gold Medal St. Brigid

(None Genuine without our Gold Medal Seal.)

12, 3/-; 25, 5/6; 50, 9/6; 100, 18/-

Plant now for bloom from late Summer onwards throughout Autumn and Winter.

Miss Campbell, Harewood, Seaton, Feb. 21st, 1925 writes:—"The St. Brigid Anemones I had from you (MAY, 1924) were VERY beautiful and are in bloom now."

Please write for Current Price List of Choicest Flowers for planting now.

PLEASE MENTION "THE GARDEN" WHEN WRITING.

REAMSBOTTOM & CO., TOWER NURSERIES,  
WEST DRAYTON, MIDDLESEX.

## Bearded Irises

We have a splendid stock of clean strong plants of the most lovely of the Bearded Irises for present planting. 13 distinct varieties in a wide range of colouring

22/- and 26/-, post free

N.B.—The best time to plant is latter part of July, throughout August, and early September.

LOWE & GIBSON, Crawley Down, Sussex

Please mention THE GARDEN when writing.

## Notes from Maidstone.

### CAMPANULAS.

The Dwarf Campanulas are a most useful and satisfactory group of rock plants.

The season opens with Alyssum, Aubrietias, Saxifrage and Rock Roses, and when their splendour begins to wane, the Campanulas are just coming into bloom. We can recommend the following:—

Garganica, its varieties hirsuta with silvery foliage and W. H. Paine, kewensis, muralis, pulla, pulloides, pusilla, rhomboidea, Stansfieldii, carpatica Riverslea and White Star.

We can offer the above collection, all pot grown plants, for 12/6, packing free and carriage paid.

We can also offer the somewhat rare Campanula nitida, 3/6 each.

George Bunyard & Co., Ltd.,

The Royal Nurseries,

Established 1796. Maidstone.

# WALLACE'S IRISES

## SPECIAL OFFER

of Bearded Irises for  
DRY POSITIONS.

ALCAZAR .. ..	1/6
ARCHEVEQUE .. ..	1/6
AZURE .. ..	2/-
CAMELOT .. ..	2/6
ELDORADO .. ..	1/6
FRO .. ..	1/-
LADY FOSTER .. ..	3/6
LORD OF JUNE .. ..	1/6
MARGARET MOOR .. ..	2/6
PALLIDA DALMATICA .. ..	1/3
PROSPER LAUGIER .. ..	1/6
QUAKER LADY .. ..	3/6
RODNEY .. ..	2/6

Descriptions of all the above will be found in Mr. J. L. Gibson's article in this issue.

1 of each for 22/-    2 of each for 40/-  
3 of each for 55/-    6 of each for £5

30 Years Collecting!  
30 Years Selecting!!  
30 Years Rejecting!!!

HAVE MADE THE  
**WALLACE  
COLLECTION**

THE  
FINEST IN THE WORLD.

**PLANT NOW.**

Catalogue free on application.

## SPECIAL OFFER

of Iris Species for  
DAMP POSITIONS.

AUREA .. ..	1/6
DELAVAYI .. ..	1/-
FULVALA VIOLACEA .. ..	1/6
GIGANTEA .. ..	1/3

(Japanese Irises).

KÆMPFERI Morning Mists	2/6
" Blushing Empress	2/6
" Moonlight Waves	2/6
SIBIRICA alba .. ..	9d.
" orientalis .. ..	9d.
" Emperor	1/6
" Perry's Blue .. ..	1/6
SPURIA .. ..	9d.

1 of each for 17/-    2 of each for 30/-  
3 of each for 40/-    6 of each for 70/-

R. WALLACE & CO., LTD., The Old Gardens, TUNBRIDGE WELLS

Please mention THE GARDEN when writing.





VOL. LXXXIX.—No. 2800.

JULY 18, 1925

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.

Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2.

Offices for Advertisements: 8-11, SOUTHAMPTON STREET, STRAND, W.C.2.

Entered as Second-class Matter at the New York, N.Y., Post Office.



A HANDSOME AND STATELY BORDER OF PALLIDA IRISES EDGED WITH NEPETA. THE CONTRASTING TONES OF BLUE ARE CONSIDERABLY ENHANCED BY THE BACKGROUND OF FESTOONS OF ROSES AND BY THE DARKER GREEN OF THE SURROUNDING SHRUBS AND TREES.



# IRISES FOR THE SMALL GARDEN

ALTHOUGH SPACE IN THE GARDEN MAY BE LIMITED, A CORNER SHOULD BE FOUND IN WHICH TO HOUSE A FEW REPRESENTATIVES OF THIS HANDSOME GENUS. IN FRONT OF SHRUBBERY PLANTINGS OR INCLUDED IN THE HERBACEOUS BORDER THEY LOOK MOST EFFECTIVE.

THE mentality that leads one to gardening is often fascinated by that widely diversified family of plants known as the irids. Into this Natural Order falls the iris, a genus that is represented, in one form or another, in, perhaps, as many gardens as any member of the floral world. But that representation is too often embodied in a few stray plants of the ill-named *Iris germanica*, which adds but a feeble quota

flower borders. One's interest in the iris grows with experience. A first planting of, perhaps, common and well known varieties fixes the attention on what are undoubtedly very beautiful flowers. Ambition soon begins to crave, and seductive catalogues are scanned, or selections made at the shows with a view to adding some choicer sorts at the next planting season. Insidiously and almost unconsciously a new hobby has been

added to the joys of the garden, and a very pleasing and much valued one it becomes. But if one is bent on pursuing this hobby to its furthest possibilities, he is likely to have little reason for thinking of the iris as "the poor man's orchid." Six or seven guineas is not an uncommon price for a root of a new or recently introduced variety, and, while these are extreme and fancy prices, many of the newest additions to this iris group are undoubtedly of very high rank, and without excellence would never survive a false standard of price for more than one season.

The average grower will, of course, pay scant heed to those new things rejoicing in such highly polished prices, the more blithely as he knows there is wide enough choice at moderate, and even modest cost.

The bearded iris belongs to and is a typical example of that race of garden plants termed "thrifty." That is to say, it is easy to grow and is easily propagated. It would pay, therefore, to start a collection by obtaining even one plant each of, say, a dozen varieties, and from these increasing the stock as one's requirements or available space dictates.

Now, it is not an easy matter to give advice on the selection of a small number of sorts where a couple of hundred make insistent call for inclusion. Here, however, is a "baker's dozen" of standard well tried sorts, varied in colour, cheap in price, containing both tall and dwarf growers, all of good constitution and easy of increase, a very fitting collection for a small garden wherewith to whet the appetite for further adventures.

**ALCAZAR.**—This is a French variety raised about fifteen years ago, still in the front rank, finely upstanding in growth and flower-spike, and richly coloured. Standards blue

violet with a faint suspicion of bronze, falls deep violet-purple with distinct bronze veining at the haft.

**ARCHEVEQUE.**—Same origin as Alcazar and about the same time. A dwarf grower, extremely rich in colour. Standards violet purple of velvety texture; falls deep purple, flowers large and handsome.

**AZURE.**—A "Bliss" seedling introduced in 1918. Of all the many blue-toned irises, this is easily my first favourite among the cheaper sorts, the contrast between the standards and falls forming a perfect balance and giving in the mass a rich and telling effect. Standards lavender blue; falls deep violet blue.



BEARDED IRISES ALONG THE PATHSIDE.



IN SEMI-NATURAL GROUPS BEARDED IRISES ARE ALWAYS EFFECTIVE.

of gaiety or colour to a garden, and that only for the briefest period in early summer.

This is not an article for those deeply schooled in the iris as a genus; such folks would tell you how you may cull iris flowers right through the winter and early spring from the time of *stylosa* and *histrioides* till *Delavayi* closes the calendar in September or October. The purpose of these notes is rather to give a few common-sense hints on the culture of the tall bearded irises, which have become so popular during the last few years, and whose range of colouring has so widened under the care of the hybridist that these plants now form one of the most honoured and valuable occupants of our modern



**CAMELOT** (Bliss, 1918). — Tall-growing plant and the flowers are an excellent foil to the prevailing iris colours. Standards and falls are creamy white, delicately edged pale violet.

**ELDORADO**. — Another French introduction very attractive in its combination of colours. The standards are yellowish bronze with shading of heliotrope; falls bright purple with bronze yellow showing at the edges.

**FRO**. — A German iris, very free flowering and beautiful, medium height. The standards are bright golden yellow and the falls purple crimson slightly edged yellow.

**LADY FOSTER**. — Raised by Sir Michel Foster and introduced in 1913. Still one of the finest, the flowers being very large and of stout texture. The standards are pale violet blue, the falls darker in tone with a veining of old gold.

**LORD OF JUNE**. — One of Mr. Yeld's splendid introductions and has been in commerce some fourteen years. I think this is the most sweetly scented of all the irises, and its tall, commanding appearance and fine colour will ensure its selection in all gardens for a long time yet. Standards soft lavender blue; falls rich violet.

**MARGARET MOOR** (Bliss, 1918). — Standards and falls of this variety are both lilac red, the latter being deeper in tone.

A valuable variant from the dominant blue tones.

**PALLIDA DALMATICA** (Princess Beatrice). — This wonderful iris has been in cultivation since the sixteenth century, and is still highly valued in the best collections. The foliage is vigorous, broad and glaucous, and the flowers stand high on strong upright stems. Both standards and falls are of beautiful pale lavender blue.

**PROSPER LAUGIER**. — A French improvement on the old *Jacquesiana*. Very floriferous and quickly forms bold clumps. The standards are a combination of brown heliotrope and bronze, and

condition than after a thoroughly dry period following the flowering season, and I can never remember seeing the foliage showing signs of distress for want of moisture. Even young seedlings three months old from germination will flourish happily in light soil during a long, hot, dry spell such as we have had this summer, and that without aid from artificial watering.

Nature's demand, then, is for a well drained soil, but it seems to matter little what the composition of that soil is. I have seen irises growing very contentedly in all sorts of mediums, from the lightest sandy loam to heavy clay. If there is any deficiency of lime in the soil, an annual dressing should be given and, if possible, a liberal quantity of crushed mortar rubble should be dug into heavy soils when beds are being prepared. The choice of a sunny aspect is another consideration making for their

the falls deep violet crimson. A striking flower.

**QUAKER LADY**. — An American product very quaint and dainty in its tender colour scheme. Standards are smoky lavender suffused with yellow; falls similar, but deeper, with some violet flushing.

**RODNEY**. — Introduced in 1919 by Mr. Bliss, this is as near to a true self blue as we have. A tall branching stem throws the flowers well up, and these are of beautiful form as well as colour. A most desirable sort.

The culture of the bearded irises is simple, but frequently misunderstood. In conversation with garden-loving folk it is astonishing how often one is asked if these plants can be grown without the presence of a pond or stream. Evidently the conviction has got firmly embedded in the public mind that continual moisture is essential to their well-being. So far is this wrong that the *Iris germanica* race is one of the best drought resisters in our gardens. The plants are never in better con-



THE STATELY IRIS PALLIDA DALMATICA.



THE GIANT ALCAZAR.



LADY FOSTER, A GOOD GARDEN VARIETY.



successful culture. Although irises will live and make an appearance of fairly healthy growth in shady or overhung quarters, they will only do really well in a position where they have free access to all the sunshine this island of "depressions" can get. Shallow planting must be adopted so that the upper part of the rhizome is quite exposed to sun and air.

The question of when to plant is an affair of extensive discussion. Some very successful growers declare September and October to be the best time, but my own experience,

resulting from transplantations over the whole period from July to Christmas, tells me that the best results of all come from August operations, followed closely by those of early September, the latter being conspicuously better than those of late September and October. Yet I have received rhizomes, packed quite dry in a cardboard box, from the middle States of America just before Christmas, and they bloomed beautifully early in the June following. August and early September are, however, the periods I should choose had I full command of my time for planting at will.

J. L. GIBSON.

## IRIS SIBIRICA AND ITS ALLIES

BY W. R. DYKES.

**M**OST gardeners have heard of *Iris sibirica* even if they do not grow it, but comparatively few realise that it is only one of a number of species that form together a separate section of the genus. All come from Europe or Asia, with the single exception of the American *I. prismatica*, which is very distinct, but which seems, at any rate, more closely allied to the members of the *sibirica* group than to those of any other section of the genus.

All the members of the *sibirica* section like a cool, moist soil containing plenty of humus, and some will succeed where the roots penetrate below the water level in the soil, though they are also capable of doing well in a herbaceous border provided that the surface is mulched and manured. In my experience, divided plants never do so well as those which are put out as seedlings into their flowering positions and left undisturbed. There is, of course, the difficulty that seedlings of the different varieties do not come absolutely true from seeds, while even among seedlings of the species there is a certain amount of variation. When plants must be moved, or when it is desired to propagate by division a particular

form or variety, the operation is best carried out either in early April when growth is just beginning or in September when the soil is usually moist and comparatively warm. If plants are moved in April, great care must be taken to keep the ground round them moist until they are completely re-established.

It is characteristic of the various members of the *sibirica* group that they form a more or less compact mass of slender rhizomes, from which grow a large number of roots, a great contrast to the somewhat sparse root fibres of the bearded irises. All the species except the Himalaya *I. Clarkei* and the American *I. prismatica* have more or less hollow stems, though in the case of some, such as *I. chrysographes*, the central cavity is nearly filled with pith.

*I. sibirica* itself seems to owe its name to a confusion with *I. orientalis*, because it appears to be a European species, and it is doubtful whether the true plant is found east of the Urals. It grows wild near the upper part of the Rhine, in Switzerland, Hungary and central Russia. The relatively small blue flowers stand high above the foliage on tall, slender stems, which are nearly twice as long as the leaves. *I. orientalis* has large flowers on shorter stems, which only raise them above the foliage, because the tips of the leaves bend over and droop. Of both species there are albino forms, that of *I. orientalis* being the well known Snow Queen, which is a purer white than that of the various varieties of *I. sibirica*, for the latter are more or less tinged or flushed with faint lilac or blue. Some forms of *I. orientalis* have their spathe valves heavily flushed with red purple, which has earned for them the name of *sanguinea*, though these red spathes are by no means a constant character.

Hybridisation between these two species produces interesting results, for the deep blue of the wild flowers can be diluted to a sky blue by crossing with the white, and the large flowers of *orientalis* can be obtained on the tall stems of *sibirica*.

Both *I. sibirica* and *I. orientalis* have their flowers heavily veined and flushed with deep blue purple on a white ground, which can, however, be changed to yellow by crossing them with *I. Wilsonii*, a yellow-flowered species from western China. The latter is not a very striking plant, for the yellow is pale in the somewhat twisted standards, and often dotted and flecked with purple on the falls.

*I. Forrestii* is another species from western China of more slender growth and narrow grassy foliage, but with flowers usually of a far clearer yellow and of more pleasing shape.

The most richly coloured species of the whole group is *I. chrysographes*, which earned its name, when I first saw it in flower, from the fact that its deep velvety purple falls are veined or streaked with gold over their central area. It comes from western China, where there appear to be several other closely related species or local forms. It is unfortunate that the various explorers, who since the beginning of the century have visited the great storehouse of good plants in western China, seem all to have been more interested in rhododendrons and other flowering shrubs than in anything so lowly as an iris. Consequently, we do not know as much as we might about this group of irises, and can only suspect that there are several good things yet to come into our gardens.

*I. Bulleyana* was first described as a wild species from the same region, but the variation among its seedlings casts some doubt on its claim to specific rank. It grows about 2ft. high, with somewhat narrow leaves and has flowers veined and blotched with blue on a white ground.



THE TALL AND HANDSOME IRIS SIBIRICA IN CONGENIAL SURROUNDINGS.



One of the tallest of all irises, and one that is valuable for its habit of flowering late in June, is *I. Delavayi* with long, drooping falls, on the central area of which appear large white blotches amid the surrounding purple. The first introduction of this species brought a form with dark red purple flowers, but later on some seeds, which were, I believe, collected by Mr. E. H. Wilson, gave me a whole series of colour forms, ranging through blue, as well as red, purple. A very pretty hybrid can be made by crossing *I. Delavayi* with *I. Forresti* or *I. Wilsoni*, for then the white ground of the falls becomes yellow.

The Himalayan *I. Clarkei*, from the neighbourhood of Darjeeling and the Chumbi Valley, is distinguished by the polished upper surface of its foliage and by its solid and not hollow stem. There is also extraordinary variation among the flowers, both in the shade of purple colour and in the markings and blotches on the falls. The stem also branches low down and often more than once, so that this species is abundantly distinct from the others in the group.

*I. prismatica*, from the north-eastern United States, has flowers like those of a small *I. sibirica* on wiry stems, which are characteristically bent and not stiffly erect as in the case of *I. sibirica* itself. The growth is much less compact than that of the European and Asiatic species, and the tufts of leaves appear at some distance from each other. To do well *I. prismatica* needs a moist, cool position.

All these irises are easily raised from seeds, and should be sown in the autumn in pots, which are best sunk to the rim in a bed of sand or ashes in an open position. The young seedlings should appear early in the year, and the pots may then be given the protection of a cold frame. By the end of May or early in June they should be big enough to be planted out in their permanent positions, where they should begin to flower in the following year.

## IRISES AND LUPINS

TO make a brave show in the herbaceous border during the first three weeks of June there is nothing more effective than a bold grouping of lupins and irises. The choice of variety is important, but even more so is the manner of planting, for the mistake so often made of planting nothing but the dwarfier plants in the forward positions must be avoided if beauty and not conformity is the first consideration, so many otherwise beautiful borders being spoiled by this, and having a flat and uniform appearance.

An occasional iris or lupin, for instance, among dwarfier plants when on the very margin of the border, or even growing so as to project over a flagged walk, breaks the outline and, standing apart, gives one the same sense of pleasure as the stray self-sown flower in path or wall.

In middle and backward positions tree lupins and polyphyllus can be grown intermingled, the differences in stature adding greatly to the charm of each, and the former making very bold growth where the soil is at all suitable. Neither plant is at all exacting in this respect, and lupins have become greater and greater favourites during the last few years, their



AN EFFECTIVE GROUP OF IRIS DALMATICA AND LUPINS.

delightful fragrance and the decorative effect of their habit of growth, as well as the development of a wonderful range of colours, having combined to increase their popularity.

Perhaps the most beautiful of the flag irises to grow with lupins is that shown in the illustration—*Iris dalmatica*—having several advantages for the purpose over other varieties and, being later in flowering than many of the group, it is at its best at the same time as the lupins. It is a most beautiful clear pale blue with slightly darker "falls," being much more striking than *pallida* or *Florentina*, two paler varieties somewhat resembling it. All three have glaucous foliage, but *Iris dalmatica* has a much bolder flag, and the flower-stem is proportionately much taller, many of those in the illustration measuring 3ft. 8ins. To add still further to its height and to make it free-flowering it is a good plan to plant the groups on small mounds in the border, for preference with a stone or rubble foundation and a couple of feet in diameter. This, while adding to the height, also ensures good drainage and has a very marked effect on the flowering.

## CREEPING PLANTS IN THE GARDEN

BY DR. R. LLOYD PRAEGER.

FROM the point of view of a contributor, one advantage of an editor (of course, I mean one of *many* advantages) is that he sometimes suggests a subject for an article which the contributor himself would not have hit upon. A contingent disadvantage is that the contributor may not be quite sure what the editor is driving at. "Creeping Plants in the Garden" is capable of various interpretations, according to the taste and fancy of the interpreter. It might herald a procession headed by stonecrop or Solomon's seal or even Virginian creeper. When in doubt, it is well to begin with a definition; that clears the air and gives one a hint as to what one is talking (or writing) about. A creeping plant, according to Daydon Jackson's "Glossary of Botanic Terms," is one whose stem runs along or under the ground and roots at intervals. This excludes on the one hand plants which merely lie upon the ground (trailers) and, on the other, the so-called "creepers"

of our walls and arbours. It includes all things that root as they run.

Creeping plants are plants with creeping stems, and to get at the inwardness of creeping stems, their variety and their vagaries, we must spend a few moments in considering the question of stems in general. The majority of stems, annual or perennial, show a more or less well marked alternation of nodes and internodes. The nodes are the points at which leaves are produced. They are often swollen; in hollow stems they are usually accompanied by a transverse partition; and they are the points at which branches and additional roots usually originate, or are capable of originating. The internodes are the spaces between the nodes. They are usually uniform throughout their length, and incapable of giving rise to branches or roots. The arrangement of the leaves on the stem, and also the distance between them (*i.e.*, the length of



the internodes) vary greatly in different plants, and it is this that to a great extent gives variety and character to their appearance.

While in plants with upright stems roots are seldom produced from the nodes (save when we plant portions of stem as cuttings), in creeping plants the production of nodal roots is characteristic. One effect of this is very important. A plant with upright stems has to rely upon its original root-system for all root purposes, that is, for the absorption of water and its dissolved salts, and for the safe anchoring of the plant; and no matter how much the stem elongates, these roots and the whole length of the stem are constantly in use, sending up materials to the growing parts. But in creeping plants the nodal roots short-circuit these arrangements. As the stem lengthens new roots are forming continually; the original roots and the older parts of the stem are not required, and die away, and there is no theoretical reason why a creeping stem should not go on creeping from Land's End to John o' Groat's, or why such a travelling plant should not continue creeping for a thousand years. When one looks at a field of bracken, one may reflect that the whole sea of greenery may have arisen from a single spore. Given only time enough, one scrap of couch-grass may fill a whole garden. This readiness to root

we may take the "carpeters" of the rock garden—*cotulas* and *acænas*, the small New Zealand *epilobiums*, *thymes*, *raoulias*, *Lippia nodiflora*, etc. These have stems which lie close to but above the ground, producing small leaves singly or in pairs, and from the same points frequent tufts of fibrous roots. Two dainty tiny members of the same group are *Arenaria balearica* and *Mentha Requienii*. The usefulness of these carpeters in covering areas of soil or of path, or even damp stones, is well known, and needs no comment. In these plants there is only the one kind of stem, which creeps on indefinitely, bearing branches and flowers. Another common type is illustrated by the strawberry, *sitfast*, *Geum reptans*, several *potentillas*, etc. Here a short, erect stem produces slender prostrate shoots, consisting of a very long internode at the extremity of which a similar erect shoot and a tuft of roots are produced, also an extension of the prostrate shoot, which thus goes looping along till the close of the season, when the long internodes die away, leaving a number of rooted young plants sitting round the parent. A third type is exemplified by the common bramble, *Lithospermum purpureo-cæruleum* and the bugle, *Ajuga reptans*. In these the arching stems are leafy, and in autumn they take root at the tip to form new crowns in the following season. The crowns so formed may

persist for many years, giving out similar shoots annually, as in the bramble; or they may flower and die in the ensuing season, as in the bugle. But the precise plan on which the plants work is very varied, and need not be followed here. Any gardener can study it for himself, and he will find it interesting and suggestive. The ultimate effect is that such plants tend to form a tangled mass of interlacing stems, spreading rather fast; their use and the dangers of their use in the garden are evident from this.

So far, the creeping plants which have been mentioned have stems which run *above* the ground, but many of the most characteristic of the creepers have underground stems. In some these stems prefer to be half-buried, and plough along with their backs showing above the soil. The great *Saxifraga peltata* does this conspicuously, and many irises. The blood-root (*sanguinaria*) and wood anemone

show the same tendency. In all these the stems are very succulent, and are used to store up food. Their creeping, branching habit tends to the production of large patches. Many other familiar creepers prefer to keep their stems out of harm's way, in, or zins. down in the soil. Here belongs, indeed, the main mass of the creeping plants of the garden—woodruff and lily of the valley, *Campanula pusilla* and *Calceolaria polyrhiza*, *epimedium* and *maianthemum*, *helianthus* and *thermopsis*—all kinds of plants, large and small, some spreading a foot per year and some an inch.

Where creeping stems are more deeply buried and cannot conveniently send each leaf up through the soil into the air, we often find a division of labour coming in. The main stem frequently has its leaves reduced to mere colourless scales, but along with similar underground branches it produces branches which grow up into the air and bear green leaves and flowers. This is what *appears* to happen in many grasses and sedges, but actually in these the subterranean stem soon grows up into the air, sending out a side shoot below which continues the underground stem, and in turn grows upwards. It comes to the same thing as regards result. In the creeping grasses and sedges the scale leaves, which are really ordinary leaves transmogrified, are often very hard and flinty, and at the



CAMPANULA PUSILLA, ONE OF THE MOST CHARMING OF CREEPING PLANTS.

at the nodes makes creeping plants very easy of propagation, since every node is a potential new plant. As we know to our cost, it makes weeds with creeping stems the most dangerous of all weeds, especially if these stems be underground, as in couch-grass, bracken and bindweed, for every buried scrap which is left behind in digging is capable of starting the trouble all over again.

One or two other considerations relating to creeping stems have a practical application in gardening, and deserve mention. For instance, stems of this kind have not to maintain the weight of the plant as upright stems have, nor are they exposed to wind; therefore instead of becoming thick and stiff, they generally remain thin and soft. The roots, again, are somewhat ephemeral, since the plant keeps moving forward steadily; in consequence, though many, the roots are generally short. Perhaps it is for this reason that creeping stems are so characteristic of plants of wet places—the roots may not be long enough to penetrate to the damp lower layers of soil in places which are dry.

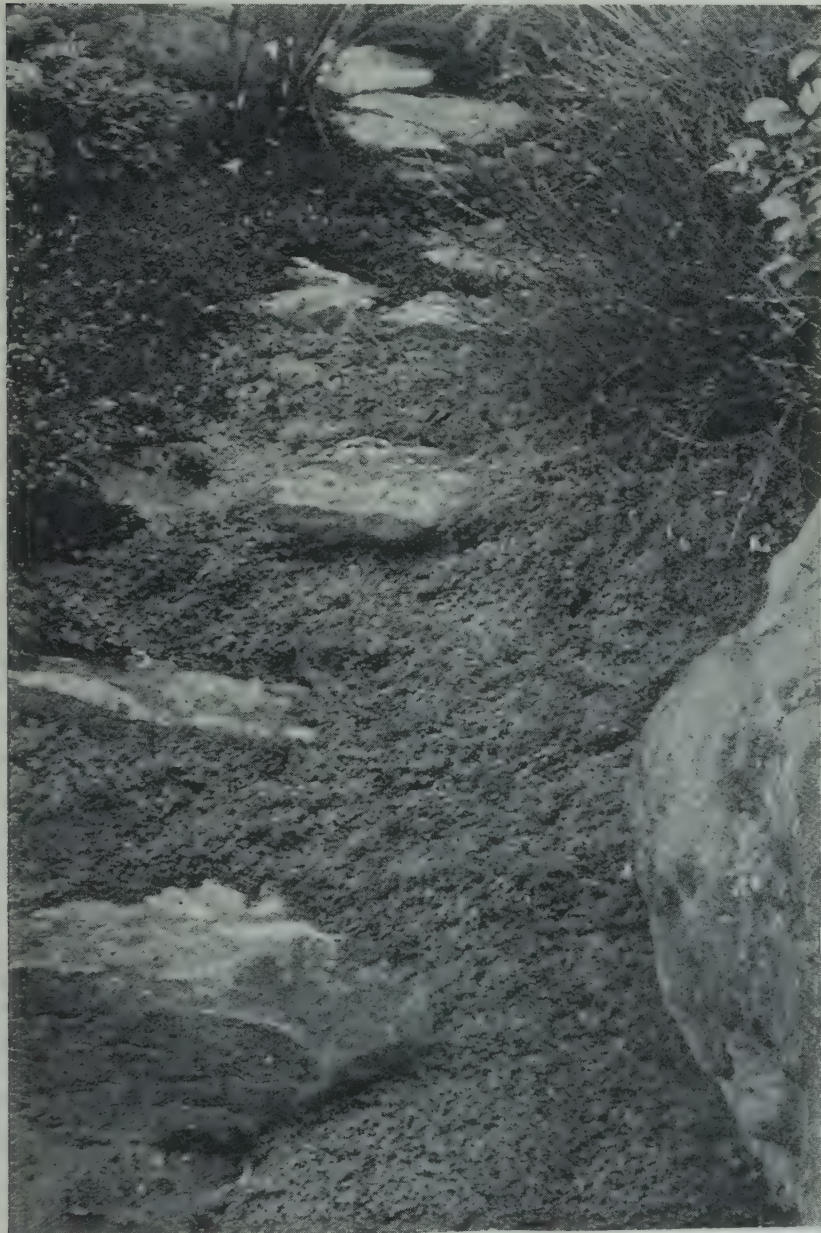
We may now proceed to review the various types of creeping plants as exemplified in our gardens, and consider how their peculiar modes of growth fit or unfit them for use in horticulture. To see creeping plants at their creepiest,



tip of the stem form so firm and sharp a point that one can prick one's finger on it. The usefulness of such a spear for forcing a way through hard ground can be imagined. In many plants the aerial and subterranean shoots, in pursuance of their respective functions, have become so unlike each other in appearance that if we saw them apart we could not guess that they belonged to the same plant. The bindweed and field thistle are familiar examples. In these the annual stems which bear leaves and flowers are highly developed and characteristic, while the perennial part consists of soft, colourless, formless, root-like growths, helpless-looking and ugly, but possessed of a fiendish vitality and power of penetration which places them in the forefront of enterprising and ineradicable weeds.

In some plants the scale leaves of the underground creeping stems are very conspicuous and peculiar. In the coralwort, for instance, of which one species, *Dentaria bulbifera*, is an English wild flower, the white, brittle underground stems are covered with tooth-like, white, fleshy scales, while the aerial portion consists of a smooth 2ft. stem bearing green, pinnate leaves and purple blossoms, and in the axils of the leaves curious shiny black bulbils, rough and scaly. These, if planted, grow at once into white scaly underground stems. The toothwort, another native plant, has stems still more scaly, and the scales are so curious in their structure that they were long believed to be insect traps, like the bladders of *utricularia*. From these scaly stems roots proceed which fasten upon the roots of trees and draw nourishment therefrom, for the plant is a parasite. The above-ground growth consists of cream-coloured leafless scaly spikes of succulent drooping flowers.

Creeping plants are not a race apart, but merge by degrees through the trailers into the main army of upright plants.



THYMUS SERPYLLIFOLIUM IN A CHOICE SITUATION CASCADING OVER ROCKY STEPS



SOME CREEPING PLANTS, SUCH AS *ARENARIA BALEARICA*, ARE ESPECIALLY SUITED FOR CLOTHING SHADY WALLS.

In species of very many different groups the stem has a tendency to develop roots when it is in contact with moist soil, just as roots often tend to produce shoots under the stimulus of light and air. These last are true *suckers*, which in the correct sense do not arise from underground stems, but from ordinary roots. Some trees produce them habitually, like the white poplar, and, in the garden, cherries and plums. The tendency of stems to root is much more widespread. Where it occurs in plants which do not creep we call it layering, and it is one of the most important means of increasing shrubs which do not strike easily as cuttings. Layering is, in a sense, forcing plants to creep which do not do so naturally.

The creeping habit is especially developed in plants of lakes, ponds and wet places, and it is this that makes the water garden so difficult a problem. Bulrushes (*scirpus*), reedmace (*typha*), sweet flag (*acorus*), arrowhead (*sagittaria*), pondweeds (*potamogeton*) and their fragrant cousin *aponogeton*, water lilies, all have stems which creep through the mud, many of them vigorously. Safely protected by the water, we cannot keep them in check, and in a few years hopeless confusion is the result. The marsh garden is just as bad, for marsh plants also generally creep. Look at the tangle in our own marshes of yellow loosestrife, water mint, gipsywort, skullcap, sedges and twenty others. How can we keep the water garden in order, then? Nohow, except by sticking to the comparatively few plants which do not creep, or only slowly. But by eliminating the vigorous ones, like *typha*, *scirpus* and that scourge the water horsetail, and re-making at intervals, order may be maintained to some extent.

Then there are creeping shrubs, some of which are as bad as the water plants for introducing confusion where one wishes order to reign. The well known snowberry, *Symphoricarpos racemosus*, is perhaps the worst offender in this respect. Some of the *coriarias*, too, need to be introduced with caution, as they run about underground and keep popping up where they are not wanted, and there are many others.



To sum up this rambling dissertation, a few facts emerge which are useful points for the gardener. Creeping plants in general have short roots, and need to creep in order to reach fresh food supplies. We cannot, therefore, confine them rigidly to a small area without periodical replanting and feeding. Generally speaking, they are suited to moist rather than to dry places. Those that creep below ground need constant

watching if there are prized plants in their vicinity. Where they cannot conveniently be kept in check, as in water or among stones, they should not be introduced at all unless the intention is to let them run riot. A little fine top-dressing seldom comes amiss. In the case of rock plants it should be sandy, that it may easily work down through the tangle of leaves and stems.

## DISEASES AND PESTS OF VEGETABLES.

**G**OOD cultivation does not consist solely of soil treatment, sowing, planting, feeding, training, etc.; it includes successful battles against disease and insect pests, which are always quick to attack weakly specimens and bring low the strongest, if they themselves are not killed or turned aside in time.

The following are some of the most dangerous diseases and pests of particular vegetables that the cultivator must guard against:

### ASPARAGUS.

Probably many cultivators have observed bare places in their asparagus beds when the young "grass" is, or should be, growing freely. In many instances, the beetles and larvæ are feeding on the tender tips just under the soil, and examination should take place by removing soil. I have seen plants almost denuded of their young, feathery foliage in summer by the larvæ of the beetle. The soil should be freely covered with soot in the autumn, and in spring all beetles found on the bed should be killed; they are darker in colour than the ladybird. A soft-soap and paraffin mixture should be syringed on the foliage directly any larvæ are observed. Boil slowly 8 oz. of soft-soap for ten minutes in half a gallon of rain-water, and add 1 pint of paraffin afterwards. This will make 6 gallons of water for syringing forcibly on the foliage. The emulsion should be well stirred when being applied.

Asparagus rust is troublesome in some districts. If, in the summer, the plants turn brown, apply Bordeaux mixture in a fine spray, wetting all parts. The weather should be calm at the time of spraying.

### BROAD BEANS.

Black aphides soon destroy the plants if they are not themselves destroyed directly they are found. They are dark brown, but are always referred to as black. When the plants approach the flowering stage, a constant watch should be the rule, and, on the appearance of the first aphid, remove the tip of the plant, as the pest starts at the top and multiplies downwards. The removed tops should be collected and burned. Little more trouble need be taken. The bean beetle is not often troublesome, as our seedsmen are careful in the preparation of the seeds. Furthermore, where seeds contain the beetle, the latter perish in them when the seeds swell in the soil. The same remarks apply to the seeds of peas.

### RUNNER BEANS.

Thrips and red spider will, in some hot seasons, almost ruin the plants. The leaves of these plants are favourite homes of the red spider. The latter saps

the strength-juices of the leaves, and, if left unchecked, reduces the latter to skeletons in a short time. Plants growing in a well trenched soil rarely suffer to the same extent as those in a poor, shallow one. The insects protect themselves by weaving webs, and light syringings leave them dry under the webs. The garden engine is better than the syringe,



*asparagus*  
a, a. brown beetle grub; b, potato black scab  
c, c. potato disease; *Phytophthora infestans*,  
brown blotches; d, conium germinating,  
e, yucca; f, f. potato leaf-curl;  
g, black aphides on broad beans; h, top here,  
i, broad bean and beetle; k, pea, and beetle  
pupa; m, potato diseased tuber; n, section  
showing disease streaks; o, p, show the  
first diseased patches. —

but in each case the water should be directed to the undersides of the leaves. Use clear water only, and saturate the soil at the roots twice a week in dry weather, applying a good surface mulch after the first watering. Thrips often do much damage to runner beans, destroying the flowers as they open. The pests are sometimes conveyed to the new crop when old stakes are used again. But just before the flowers open syringe the plants with a soft-soap emulsion. Boil 1 lb. of soft-soap in 1 gallon of rain-water and, afterwards, add 10 gallons of clear water. The soft-soap should boil gently for twenty minutes. The prepared liquid should be applied in a light spray, passing one way along the row and then return, treating both sides in a similar manner.

### PEAS.

In dry weather, both thrips and mildew do a lot of harm to the foliage, and, should remedial measures be neglected, the crop of sound pods will be a small one. Vigorous syringing and judicious feeding with surface mulches will keep the growths clean and healthy. An attack of mildew may come where the plants are rooting in a constantly moist soil, or when they are, daily, artificially watered. Of course, we want the happy medium, and the conditions just referred to would result in a chill to plants and pods and conduce to a severe form of mildew.

Frequently, very fine pods are spoiled through the seeds in them being attacked by green and yellow grubs. When the flowers open, a moth lays her eggs in them, and, of course, they are enclosed in the pods, hatching as the seed swells to maturity. The only thing to do is to syringe the plants when the first flowers open, with a weak paraffin emulsion, or one made from quassia chips or extract, to render the foliage distasteful to the moth. The pea weevil eats the leaves, and sparrows are often blamed for this. Apply a light dusting of soot when the drills are open, and frequently after the young plants appear above the soil.

Mice sometimes destroy the seeds soon after they are sown. Procure some glass jam-jars about 7 ins. deep, bury them at intervals of 7 ft. apart, with the rims level with the soil. Three-parts fill them with clear water, and also smear some grease—mutton-fat for preference—inside the neck of each jar and just below the rims, approximately 1½ ins. from the top of the jar; the mice, in trying to reach the fat, overbalance and fall into the water. As many as six are often so drowned in a single jar, and thus the quarter is cleared of mice in a short time. Rolling the seeds in red lead prior to sowing is a good old practice and often resorted to in these days.

As a guard against birds eating the pods and peas in them, nets are the best protection in the case of choice sorts required for special purposes.

### POTATOES.

Perhaps, out of all the numerous drawbacks that the noble tuber is subject to, the potato disease (*Phytophthora infestans*) is the one most generally looked for and spoken of. In addition to the quality of the cultivation, we have such varying seasons as regards weather. Moist, dull weather, commonly called "close and trying," during the month of July, favours the spread of the disease. It would take up many pages to describe adequately, in detail, the whole life history



of this one disease and its remedy, so I shall only deal with the main points. It seems to me that the plants are more subject to this blight when they are grown on the same ground year after year and from home-saved seed. Change, in both cases, is highly beneficial, certainly, of seed, after the second year. New varieties are, generally, stronger and more disease-resisting. The Bordeaux mixture is the best known remedy, but it should be applied at the end of June, before there are signs of the disease, and twice in July. The tubers, as well as the leaves, become diseased. On a misty, dull morning in mid July, one may smell the disease as one passes by a field of potatoes. The spores are liberated by currents of air, and, being light, float away, settle on sound leaves and so infect them. The spraying should be done to make it difficult for the spores to live at all, much less multiply, thus acting as a preventive or preservative

of the entire crop. Good and careful earthing-up does much to prevent the disease reaching the lower stems and tubers. If, however, the haulm is diseased, it should be cut off and burnt forthwith, as its functions are, naturally, impaired. Leaf-curl in potatoes is on the increase, but it is a disease that can be controlled very considerably. The writer has had much experience of it in the south. Seed tubers, ripened in a light, hot soil, will frequently remain hard in the soil when planted, instead of decaying, and the curled appearance of the foliage should suggest to the cultivator the condition of the "set." There is no cure, but it may be prevented if seed tubers are obtained from Scotland, or lifted at home before they are really matured, greened and sprouted in light, cool quarters. Potato scab spoils the appearance of the tubers. The writer has frequently observed badly scabbed tubers lifted on land heavily manured

with fresh farmyard manure just prior to the planting; if a light sprinkling of lime is applied before the tubers are buried with soil, scab is not as bad even when fresh manure is used. In light soils, and in all soils thoroughly broken and manured with rotted dung several weeks before planting, scab is not serious.

Black scab first appears round the eyes of the tubers and then spreads all over them. It is such a bad disease that crops affected should be destroyed.

Wireworms are mostly troublesome in newly broken grassland. The grubs are generally found in the top 3 ins., near the roots of the grass, and if this portion be peeled off and dried, then heaped and charred, the wireworm will perish. Vaporite is also very good, especially if mixed with the charred turves as they are dug in, as the fumes must be confined.

Leather-jacket grubs, the larvæ of the crane fly, can be destroyed by using Carter's "Kil-Jac." GEORGE GARNER.

## MORE ABOUT THE SUMMER ROSE SHOW

### AMATEURS' ROSES.

THE principal classes in this section contained many excellent blooms, and the competition generally was very good. The Amateur Champion Trophy was won by Dr. R. C. Turnbull, Colchester, who staged thirty-six particularly good exhibition roses. His chief sorts were Colchester, Lord Allenby, Red Star, Candeur Lyonnaise and E. F. Hudson. While the second prize collection of Mr. J. W. Hart, Potters Bar, was not quite so even in quality, it included excellent specimens of Captain Kilbee Stewart, J. W. Hart, Coronation, Gladys Harkness and Candeur Lyonnaise. Mr. F. Dennison, Leamington Spa, was a good third in this important class.

The sets of twenty-four blooms were of even higher quality than in the former class, and the first prize collection also won the Mawley Cup. This exhibit was staged by Mr. F. H. Fieldgate, Colchester, whose best blooms were of Hugh Dickson, Candeur Lyonnaise, A. Hartmann, Mrs. John Laing and Mrs. F. Dennison. Dr. Turnbull was a worthy second in this fine class, and he staged superb blooms of Mabel Morse, Mrs. K. D. McClure, Nellie Parker and Modesty. Mr. F. Dennison was a good third.

The exhibits of twelve distinct blooms also reached a high standard of excellence, and here Mr. C. H. Rigg, St. Albans, was first with J. B. Clarke, J. J. Glassford, Edgar Burnett, J. L. Mock and other good sorts. The second prize was won by Mr. A. Johnson, Bishop's Stortford, with a collection that, under other conditions, might well have taken first place. His very best were Coronation, Colleen, Modesty and J. L. Mock.

In the class for growers of fewer than 500 plants, the first prize collection of twelve blooms was also awarded the Mawley Medal as being the most meritorious exhibit in the whole of the amateurs' classes. Mr. K. de V. Pryor, Hitchin, included magnificent blooms of Mrs. C. Lamplough, Dr. A. Petyt (a brilliant crimson rose), Martha Drew and Candeur Lyonnaise. In his very good second prize set Mr. W. J. Bambridge, Kettering, showed Mrs. J. H. Welch and H. V. Machin of great merit. Mr. G. O. Nicholson, Market Harborough, had the best six blooms in this division.

Dr. Panckridge was the most successful exhibitor in the division for growers of fewer than 250 plants, and his six distinct

varieties were all excellent. Mr. W. T. Cohen, Berkhamsted, was second. The extra class, open to all amateurs, also induced a strong competition, and the first prize was won by Mr. J. E. Raze, who included Candeur Lyonnaise, Bessie Brown and Mrs. C. Lamplough in superb condition. There was also an interesting and keen competition in the class for members who had not previously won a prize, and the chief honour was won by Mr. T. C. Hodgkins, Walsall, who included fine blooms of Lemon Pillar and Lady Plymouth.

The class for growers residing within ten miles of Charing Cross apparently suffered from the great drought. But Mr. A. W. Rogers, East Putney, who also won the first prizes for growers within eight miles and within five miles of the same centre, staged creditable blooms, which included Mrs. G. Norwood, Mrs. Elisha Hicks, Florence Forrester and Mme. Louise Crette.

There were some exceedingly good blooms shown in the first prize exhibits of amateurs who grow their blooms without any paid assistance. Mr. W. J. Bambridge had Coronation, Mrs. J. H. Welch and George Dickson. Mr. W. Sunderland, Driffield, had a lovely bloom of Mrs. F. Dennison. Dr. Panckridge had Candeur Lyonnaise, Dean Hole, Mrs. J. Marriott and Mrs. C. Lamplough of great beauty. Mr. G. W. Nicholson showed Modesty and J. L. Mock. Mr. A. L. Brine, Hythe, and Mr. J. T. Owen also showed blooms of more than average merit.

The tea roses were particularly good, and the first prize twelve distinct blooms shown by Mr. F. Slaughter, Steyning, included delightful specimens of Lady Plymouth, Mme. Jules Gravereaux and W. R. Smith. Mr. W. E. Moore, who had the best six tea blooms, included White Maman Cochet, the silver-gilt medal bloom.

Dr. M. Lacroze, Roehampton, has many times won the first prize for a group of roses and, as always, he had a very charming arrangement. His varieties included Betty Hulton, Mrs. Henry Morse and Mrs. H. Stevens. Mrs. Burgess had the best smaller group, and she used excellent blooms of Lady Inchiquin, Los Angeles and Sunstar.

Mr. H. R. Darlington, Potter's Bar, added to his many triumphs in the class for twelve roses of distinct varieties, showing General McArthur, Betty Uprichard, Florence Mitton and other good sorts. Mrs. Henry Balfour

was second. Mrs. L. A. Tilley was the most successful with six varieties, having excellent stems of Silver Moon, Lady Hillingdon and Cupid. Una and American Pillar were well shown by Mr. F. Slaughter.

The baskets of roses were all very charming. The best two in the chief class of exhibition roses were excellent blooms of Mrs. G. Marriott and H. V. Machin, shown by Mr. J. E. Rayer, Worcester; and Dr. Turnbull was second with Mrs. G. Marriott and T. F. Crozier. Candeur Lyonnaise, shown by Mr. S. W. Burgess was first in Class 31, and mixed varieties shown by Mr. R. A. Smith, Hertford, was first in Class 34; while Dean Hole and Frau Karl Druschki won the first prize for Mr. E. T. Gann in Class 36. Avoca, shown by Mr. C. C. Williamson, was the best basket of twenty-four stems of a decorative rose. Mrs. Henry Morse, shown by Mr. W. T. Cohen, was the best twelve stems.

### NURSERYMEN'S CLASSES.

The many baskets of cut roses in this section made a most delightful display. The best seven baskets were shown by Mr. H. Mattock, who included Mabel Morse, Louise Crette, Golden Emblem and Lady Inchiquin. Messrs. Chaplin Brothers in their second prize set included Mrs. Tresham Gilbey and Mabel Morse of great beauty. The best three were Margaret Dickson Hamill, Lord Charlemont and Mrs. Henry Morse, shown by Mr. G. Prince. Mr. H. Drew was second. Snow Queen, shown by Messrs. D. Prior and Sons, was the best hybrid perpetual variety, and Gloire de Chédane-Guinnoiseau, shown by Messrs. J. Crosfield and Son. The best basket of a hybrid tea variety was Mrs. H. Bowles, shown by Mr. G. Prince, and Messrs. Chaplin Brothers were second with the same variety. Mme. Jules Gravereaux was shown in the first prize basket of a tea variety by Mr. C. Gregory and also by Mr. Mattock, who was second. Mrs. C. Lamplough, shown by Messrs. Chaplin Brothers, was the best basket of any variety of hybrid perpetual, hybrid tea or tea rose put into commerce since January 1st, 1919, and Captain Kilbee Stewart, shown by Mr. G. Prince, was second.

### ARTISTIC CLASSES.

Several well arranged and well grown roses were exhibited in the artistic classes. The dinner-table decorations excelled the exhibits



in all the other classes. Both the arrangement and conditions of the blooms in the bowls of mixed roses left much to be desired. Too much foliage had been used and the stalks of the blooms were not sufficiently long to form effective groups. The popularity of the variety *Mme. Butterfly* was noticeable. It was exhibited in nearly every class, and in many cases it was awarded a prize. Very beautiful specimens in perfect form were exhibited by Mrs. Courtney Page. The small rose foliage used with this rose gave a charming effect to the whole table. Mrs. F. Charlton gained a second prize in this class. Mrs. E. P. Butcher had some lovely blooms of *Los Angeles*, and Mrs. H. Barton made an attractive group with *Emma Wright*.

Mrs. Oakley Fisher was awarded the Nickerson Prize for a decoration of cut roses for a dinner-table. *Ophelia* was the variety used. Mrs. H. Barton was also competing for the Nickerson Prize, and received a second for the arrangement of *Lady Inchiquin* and a first prize for a bowl of mixed roses in another class. In a special class for competitors who had never won a first prize in the decorative section, Miss A. K. Lock received a first and Miss G. M. Zellely a second prize.

In vases of cut flowers, *Mme. Butterfly* was again the variety which received the first prize. Miss M. E. West was the exhibitor, and Mrs. Courtney Page won a second in the same class. The baskets of roses shown by Miss Griffith and Mrs. F. Charlton were both artistically arranged and in excellent condition.

In one of the table decoration classes, single varieties only could be used, and the beautiful blooms of *Irish Fireflame* were much admired. Mrs. Colston Hale won the first prize and Mrs. Oakley Fisher the second. In all the above classes amateurs only were allowed to exhibit. More vividly coloured varieties were, in many cases, used in the three open artistic classes. A table decoration of striking appearance was staged by Mrs. L. R. May, who used the variety *Mrs. Henry Bowles* to the very best advantage. *Betty Uprichard* and *Roselandia* could also be seen. Mrs. C. A. Tisdall had well shaped blooms of *Mme. Butterfly* in a prize exhibit; and Mrs. A. R. Bide also won a prize for the same variety arranged in a basket.

#### NEW AND NOTEWORTHY ROSES.

**SALTAIRE.**—Deep velvety crimson blooms, almost resembling burnt cardinal, characterise this hybrid tea variety. The foliage is rather excessive. The fragrance of this variety is exceedingly sweet. Shown by Messrs. Alex. Dickson, Limited.

**APHRODITE.**—The blooms of this hybrid tea are made up of rather pretty crinkled petals of a delicate pink. Buds are of a good shape. Shown by Messrs. Easlea.

**MISS ANNA MARIE BALLEY.**—A fine garden hybrid tea variety, orange yellow centre. Shown by Messrs. Easlea.

**BEDFORD CRIMSON.**—A fine scented crimson variety, very free and a vigorous grower. Shown by Messrs. Laxton Bros.

**LITTLE JOE.**—Good blooms of a fiery red colour, with petals cut at the edges. Shown by Messrs. D. Prior.

**LUNA.**—A hybrid tea variety with large blooms of perfect shape and of a pale yellow colour, which is deeper in the bud. Shown by Messrs. D. Prior.

**LITTLE JULIET.**—A good hybrid tea variety, carrying pinkish blooms slightly tinged with yellow. Shown by Messrs. D. Prior.

**VIVID.**—A fine exhibition variety, carrying well shaped flowers of a light crimson shade. The petals are of rich substance. Shown by Messrs. Frank Cant.

**ELSE POULSEN.**—A fine large single polyantha variety with beautifully frilled flowers of a delicate salmon pink shade. Shown by Messrs. D. Prior.

**HERA.**—A strong, bushy hybrid tea variety, with light crimson blossoms composed of rather prettily cut petals. Shown by Messrs. D. Prior.

**CHARMING PRINCESS.**—A good Pernetiana variety, the petals of the flowers having a yellowish base, which becomes pinkish on the outer margins. Shown by Messrs. D. Prior.

**JOAN HOWARTH.**—A fully double hybrid tea variety with flowers made up of large, substantial petals of a deep flesh pink colour. Shown by Messrs. Bees, Limited.

**FIREFLY.**—An excellent crimson hybrid tea sort, carrying sweet-scented, almost double blooms. The petals are of good substance and the foliage is also fine. Shown by Messrs. Bees, Limited.

**CESTRIAN.**—A fine hybrid tea exhibition variety with slightly fragrant rose-pink blooms made of close, overlapping petals of good substance. The foliage is handsome. Shown by Messrs. Bees, Limited.

**NORA HENSLow.**—A good crimson single hybrid tea variety, with flowers made up of spreading petals and a good contrasting central cluster of stamens. Shown by Mr. F. Evans.

**MURIEL CRONSHAW.**—A sweetly scented hybrid tea variety carrying good white blooms with reflexed petals. Shown by Mr. F. Evans.

**JOHN RUSSELL.**—A fine hybrid tea exhibition variety of good habit. The petals are of good substance and of a deep crimson shade. Shown by Messrs. Dobbie and Co., Edinburgh.

**MRS. TALBOT O'FARRELL.**—A good pernetiana variety which will be found suited for all garden work. It is of a good upright habit and carries long, oval pointed blooms of a pink tinged with yellow colour. Shown by Messrs. S. McGredy and Son.

**DORIS TRAYLER.**—A hybrid tea variety of good habit and very free flowering. The colour of the blooms is a shade of yellow orange, while the outside of the petals is a crimson red. The foliage is good and appears mildew-proof. Shown by Messrs. McGredy and Son.

**EVA EAKINS.**—A fine pernetiana variety with blooms of a deep salmon pink contrasting well with the handsome well grown foliage. Shown by Messrs. McGredy and Son.

**PATIENCE.**—This hybrid tea variety is free and bushy, carrying well shaped blossoms with slightly reflexed petals of an almost crushed raspberry colour. Shown by Messrs. McGredy and Son.

**WHITE ENSIGN.**—We have already said that this rose is decidedly the best new variety of its type for some years. The perfectly shaped and dead white flowers of medium size are well carried on graceful upright stems, while the foliage is also to be admired. Shown by Messrs. McGredy and Son.

**MRS. C. W. EDWARDS.**—The flowers of this upright hybrid tea variety are of a light crimson shade with a yellow base, providing a vivid contrast to the dark green foliage. Shown by Messrs. McGredy and Son.

**LADY LESLIE.**—The fine well formed deep yellow flowers of this hybrid tea variety are rather inclined to break to pink. The flowers are carried well on stout, erect stems. Shown by Messrs. McGredy and Son.

**MRS. S. PATON.**—A vivid contrast is provided by this hybrid tea variety with its medium-sized flowers of a rose pink shade and its dark glossy green foliage. Shown by Messrs. McGredy and Son.

**MARION CRAN.**—The large well formed blooms of this hybrid tea variety are of a deep reddish-shaded pink composed of petals of rather a soft waxy texture. Shown by Messrs. McGredy and Son.

**LADY WAKEFIELD.**—This hybrid tea variety is a sport from *Padre*, and carries very delicate yellow blooms. The outer margins of

the petals are tinged with rose pink. Shown by Messrs. B. R. Cant and Sons.

**LADY HELEN MAGLOONA.**—A vigorous hybrid tea variety carrying strawberry-coloured blooms which are neat and compact with close overlapping petals. The flowers are very fragrant. Shown by Messrs. Alex. Dickson, Limited.

**LADY WORTHINGTON EVANS.**—A very fine crimson red hybrid tea variety with the individual flowers of good shape and form. Shown by Messrs. Alex. Dickson, Limited.

**FRANCIS SIMS.**—A vigorous hybrid tea variety bearing numerous light, delicate rose pink blooms. The colour shades to a lighter tone towards the base of the petals. Shown by Messrs. Alex. Dickson, Limited.

**DAME EDITH HELEN.**—The large shapely blooms of this hybrid tea variety are of a fine shade of pink. These are carried on stiff, rather stout stems. Shown by Messrs. Alex. Dickson, Limited.

**LADY MARGARET STEWART** (hybrid tea) is characterised by its large, oval, egg-shaped blooms of a pure whitish yellow shading to a darker tone at the base of the petals, with a slight fragrance. Shown by Messrs. Alex. Dickson, Limited.

**PRINCESS ELIZABETH OF GREECE.**—Another hybrid tea variety, carrying medium-sized deep orange yellow blooms, which stand out well from the dark glossy green foliage. This variety looked well arranged in a basket. Shown by Messrs. Chaplin Bros.

**MARS.**—A sweetly scented hybrid tea variety, bearing medium-sized flowers of a shade of coppery pink, which becomes shaded with a bluey mauve, tinged with yellow at the base. Shown by Messrs. Chaplin Bros.

**ELLEN TERRY.**—A fine, sweet scented hybrid tea which has already gained a certificate of merit. The flowers are large and of a buff colour. Shown by Messrs. Chaplin Bros.

**MRS. HERBERT NASH.**—An excellent sweetly scented hybrid tea variety, with large, handsome blooms of deep crimson colour. Shown by Messrs. Chaplin Bros. Certificate of merit.

**J. M. HART.**—A hybrid tea variety, bearing large rose pink flowers, rather inclined to "blue." It is slightly fragrant. Shown by Messrs. Chaplin Bros.

**LADY SIDNEY EARDLEY WILMOT.**—A strong, freely branched decorative hybrid tea variety, carrying medium sized semi-double flowers of a deep salmon pink shade. Shown by Messrs. Chaplin Bros.

**SENSATION.**—A hybrid tea variety with large, sweet scented fine flowers of a rich dark velvety crimson. Shown by Messrs. G. Beckwith.

**IVY MAY.**—Hybrid tea. The rose pink blooms, flushed with gold on the outside of the petals, are most attractive. Shown by Messrs. G. Beckwith. Certificate of merit.

**JOHN HENRY.**—Another rich pink hybrid tea, carrying handsome flowers which are not too full. Shown by Messrs. G. Beckwith.

**BLOSSOM.**—The peach pink blossoms of this hybrid tea sort are flushed rose red, which shades to yellow at the base of the petals. There is a suggestion of tea fragrance. Shown by Messrs. G. Beckwith.

**AUTOCRAT.**—The large blooms of a pink to blush red shade of this hybrid tea variety are well formed and carried gracefully on long stems. Shown by Messrs. G. Beckwith.

**ANGELE PERNET.**—A vigorous Pernetiana variety, bearing vivid orange to copper blooms which are suffused with gold. Shown by Messrs. G. Beckwith.

**ANNE.**—A distinct and attractive hybrid tea sort with globular fragrant flowers of a cherry pink. Shown by Rev. J. H. Pemberton.

**I. ZINGARI.**—A fine semi-double sort with blooms of an almost coppery tint. Shown by Rev. J. H. Pemberton. Certificate of merit.

**PENELOPE.**—A hybrid musk, blossoms pink and well shaped. Shown by Rev. J. H. Pemberton. Gold medal.



# THE PROVINCIAL ROSE SHOW AT BATH

THE combined show of the Bath Horticultural Society and the National Rose Society, which was held in the beautiful Victoria Park at the western city on July 9th and 10th, was a great success from every point of view. The entries were good and the exhibits reached a high standard of excellence.

With his usual generosity, the Mayor of Bath entertained a large party to luncheon, and pleasant speeches were made.

The President of the National Rose Society as the occasion demanded, was humorous and enlightening. Mr. Frank Cant made a delightful speech, and although Mr. H. R. Darlington spoke about roses and their fragrance, when he should have dilated on the unique beauties of the City of Bath, he was informative. But it remained for Mr. J. Pitt, who responded to the toast of the Judges, to coin the epigram of the day in "a raiser's pipe is full of sacrifices," and, as he said, we owe the delightful roses of to-day to the sacrifices made by raisers.

But, to paraphrase, "the show is the thing" and roses come first. The champion trophy was won by Mr. C. Gregory, who had thirty-six excellent blooms of Rev. F. Page Roberts, Mrs. E. J. Haddon, Earl Haig, Candeur Lyonnaise, George Dickson and similar varieties. Messrs. Frank Cant and Co., who were second, had charming blooms of British Queen, Florence Forrester, George Dickson, Candeur Lyonnaise and Lady Inchiquin. The best twenty-four blooms were set up by Mr. George Prince and these also were admirable, especially Lord Charlemont, Lady Inchiquin, White Maman Cochet and A. Hartman. Mr. C. Gregory was second.

The class for twelve blooms of roses distributed since January 1st, 1920, was particularly good, and Mr. Prince showed Souvenir de Claudius Pernet, Lord Charlemont, Mrs. C. Lamplough, Earl Haig, Muriel Dickson, Lady Inchiquin and Bessie Chaplin of great merit. Messrs. F. Cant and Co. in

their second fine collection had Captain F. S. Harvey-Cant, Mrs. C. Lamplough and Mabel Morse of great excellence. There were many exhibitors of a basket of cut roses and Mr. C. Gregory was first with Mrs. C. Lamplough, and Messrs. A. Warner and Sons were second with Captain F. S. Harvey-Cant.

The five baskets of decorative roses were also of high quality. Messrs. S. McGredy and Sons showed Lord Charlemont, Mabel Morse and Gwyneth Jones of lovely appearance. Mr. J. Mattock had Lady Inchiquin and Louise Crette of considerable merit in his second prize set. Mr. Gregory showed The Queen Alexandra Rose, Golden Emblem and Mabel Morse and won the first prize for three baskets, and Mr. H. Drew, who was second, had a charming basket of Lady Inchiquin. Messrs. S. McGredy and Son, with a handsome basket of Mrs. Barracough, was alone in the class for a basket of a new variety and deservedly received the first prize.

The extent and gorgeousness of the groups of cut roses astounded the general visitors, and, indeed, they were worthy of the highest admiration. Mr. E. J. Hicks had the best large group and had built up massed pillars of Climbing Ophelia, Los Angeles, Mme. Butterfly. Mr. George Prince, in his second prize handsome group, had arches of American Pillar, K. of K. and Red Letter Day.

In the medium-sized group Mr. C. Gregory was first, and he had many desirable sorts. The Rev. J. H. Pemberton was second. Mr. J. Mattock had the best smaller group. The best twenty-four varieties were staged by Messrs. A. Warner and Sons, which included Isobel, Hortulanus Budde, Betty Uprichard and Lady Roundhay in a fine exhibit. Messrs. F. Cant and Co. were second in this popular class, and Mr. E. J. Hicks had the best twelve varieties.

In the amateur section the Jubilee Trophy was won by Mr. J. W. Hart, Potters Bar, who had lovely blooms of Mrs. C. Lamplough, Gladys Harkness and Candeur Lyonnaise (the premier bloom of the section), among his twenty-four exhibition blooms. Mr. F. Dennison was a good second. Mrs. Hy. Balfour had the best twelve varieties, and Mr. A. B. Pim, was first with six varieties. Mrs. Hy. Balfour, showing White Maman Cochet, Mrs. Hubert Taylor, Maman Cochet and other fragrant varieties, was first with tea roses.

The artistic classes were very charming. Mrs. Courtenay Page had the best dinner table decoration and was also first with a lovely bowl of roses. While Mrs. Oakley Fisher has the best vase of roses. In the open class Mr. E. J. Hicks was first with a bowl of roses.

## NEW ROSES.

The number of new seedling roses exceeded expectations and most of them possessed distinct merits.

ARTHUR COOK.—This splendid hybrid tea rose had previously won the certificate of merit and now received the highest award. It is a fully double bloom and very shapely in all stages of development. The broad petals are substantial and indicate a long period of usefulness. The colour is rich crimson flushed with velvety maroon. The neat foliage is crisp and firm and the stems possess few spines. Gold medal to Messrs. S. McGredy and Son.

DORIS TRAYLER.—A medium-sized hybrid tea variety, which is recommended for all purposes. The colour is old gold flushed with peach pink at the base of the petals. Certificate of merit to Messrs. S. McGredy and Son.

DUCHESS OF ATHOLL.—The colour of this hybrid tea rose is particularly fascinating and may be described as golden orange

lightly flushed with peach. It is very beautiful in the bud and half open stages, but when fully open the charm of shape is lost, but



DORIS TRAYLER, A FINE HYBRID TEA,

the colour is fully retained. The stems are purplish, the neat foliage is very firm and the footstalks of the flowers are spineless. Certificate of merit to Messrs. Dobbie and Co.

NANETTE.—This is a most delightful Wichuraiana variety. It bears plentiful clusters of fragrant, semi-double flowers which open roundly, disclosing a pretty cluster of golden stamens. The margins of the pure white petals are attractively undulated. It is recommended for pergolas and arches. Certificate of merit to Mr. Elisha J. Hicks.

## THE BATH SOCIETY'S CLASSES.

Two large marquees were required to hold the exhibits in the classes arranged by the Bath Horticultural Society and these all were undoubtedly the finest that has been seen in Bath for many years.

In the open classes the groups of miscellaneous plants were very artistically arranged and the first prize arrangement of Mr. C. H. Smith was very delightful. The group of begonias which won the first prize for T. Crawford was excellent.

The first prize group of hardy flowers, arranged by Messrs. H. and W. Evans, was ideally beautiful, as was Mr. C. Wall's group of cut carnations; Messrs. Blackmore and Langdon's delphiniums were also admirable.

Sweet peas were of especially high quality and Sir Randolph Baker, Bt., Ranston, Dorset, was particularly successful in the open classes in which he showed magnificent spikes of such varieties as Wild Rose, Powerscourt, Fordhook Orange, Charming and Mrs. Arnold Hitchcock. In the amateurs' classes Mr. F. Churchward, Newton Abbot, was the chief prize winner, and he had lovely vases of Royal Sovereign, Pimpernel, La France and Wild Rose.

With roses Mr. E. Rayer was very successful, and he won the silver challenge cup and also had the best twelve blooms in the class open to those who do not employ a gardener.



THE SEMI-DOUBLE BLOSSOMS OF NANETTE.



# SIMPLE GARDENING

## DAHLIAS.

THE dahlia is a tender plant as regards frost; brittle and succulent of stem, and easily damaged by strong winds. Although tuberous-rooted, the plants soon show signs of distress when a dry spell of weather comes. If ordinary care be taken during the growing period, these plants do not cause the cultivator much real trouble; it is when we neglect them that damage is often done which cannot be repaired. The majority of lovers of large, brightly coloured flowers appreciate the dahlia, and those who are inexperienced only need a few hints in order to be successful with them. The plants require a deep, rich soil, and even those growing in such, now, will be all the better for a surface mulch. Plants in a poorer-rooting medium certainly need a rich surface dressing in addition to a mulch that will prevent undue evaporation. When engaged in attending to the plants, be sure that you avoid treading upon the soil near to the roots, as the plants do not thrive as well as when the soil is left in a natural open condition just above and around the tuberous roots. Spread on the surface around each plant half-rotted stable manure quite 3 ins. deep. This dressing will be sufficient for all plants; failing it, scatter 2 oz. or 3 oz. of bone-meal on the border soil and cover it 2 ins. deep with old potting or box soil or decayed rubbish from the garden heap and ashes from the smother fire, and apply one good soaking of weak manure water, now. Tie up the branches and add more stakes where needed.

## TREATMENT OF SUMMER BEDDING OUT PLANTS.

Arranging and planting the bedding-out plants is always a busy and anxious time for the gardener. After this work is done some cultivators do not trouble themselves further about the plants, beyond giving applications of water in dry spells, such as we have recently experienced. But to obtain the very best from these border plants we must attend to them, if not daily, several times each week. It is not advisable to begin watering too soon, and when one does one should continue it consistently and apply plenty of it. There are two courses to take: one, thorough root soakings; the other, evening spraying of foliage plants, or the foliage of flowering plants, but not the blooms. The spraying refreshes, and prevents undue evaporation. Neat surface mulches are invaluable, as they, too, conserve moisture, prevent the sun unduly scorching the surface roots, and maintain the latter in a cool condition. Then there is the work of disbudding to attend to; the finest flowers on some stems are obtained by removing smaller side ones and, in the case of clusters, those around the central one. All fading flowers and leaves should be picked off daily if possible, or at least twice a week, if the beds are to be kept bright and fresh-looking. The removal of seed-pods and fading flower stems strengthens the remainder and the young ones to come. Staking is very essential and should be done neatly; while supporting

the plants, the stakes should not be too prominent, and the ties ought to be just loose enough to allow the stems to grow.

## STRAWBERRIES FOR FORCING.

Early runners taken from strong fruiting plants, firmly potted in good compost and nicely wintered in dry, cool quarters, will ensure success. I remember a lady showing me some plants in pots on her greenhouse shelf one spring, and how proud she was of them. But this pride was damped a little, owing to the lateness of the plants in flowering, and full disappointment came when I reluctantly told her that there would not be any flowers and, of course, no fruit. The real cause of the failure was the selection of quite unsuitable runners. The first young plant—the one nearest to the parent plant—on a runner should be layered, and all others beyond, on the same runner, should be cut off. These young layers may be selected from one year old plants that have borne fruits, or from two year old ones—also from those that have fruited. Often enough, one finds specimens that have not fruited surrounded by a lot of runners, very promising; and other plants, in the same row, possessing only two or three. The latter are the ones to select, and not those growing on the fruitless specimen; indeed, this latter plant, and all similar, should be dug out and destroyed. Layer direct into 3 in. pots, using good fibrous loam, about six months old from cutting, and a small

quantity of horse manure. Place a flat stone on the runner in the pot to steady the rooting plant and retain moisture round the crown and hasten the root growth. In due course, pot the young plants firmly in 6 in. pots, this time adding a little bone-meal.

## PLANTING OUT FORCED BULBS.

I know that many lovers of bulbs grown and flowered in pots, pans and boxes, discard them, as they think the bulbs are quite useless for the production of flowers in the future. If the bulbs are properly treated after the flowering stage is past, and, also, carefully planted out in an open border, a wealth of blossoms will follow there year after year. The months of July and August are very suitable for planting such bulbs, and suitable positions are open borders or open quarters in new shrubberies. But for cutting purposes I much prefer the open border somewhere in the vegetable garden. To plant in orchards and similar positions where the ground is not kept quite free from coarse weeds is to court failure, as the full strength of each bulb, weakened by forcing, should be maintained and gradually increased, not lessened. Grade the bulbs and clean them without injuring their crowns; keep the kinds distinct and thoroughly dig and manure the border prior to planting, except in the cases where leaf-soil is abundant—then use the latter liberally and no manure.

## THE DUTCH IRIS NURSERIES

**DE GOEDE BROS.,**  
BEVERWYK, HOLLAND

**Our specialty DUTCH IRIS**  
*Highest award Chelsea Show, May 19th, 1925*

PRICE LIST FOR THE ASKING.

## NICOTINE INSECTICIDES

are by far the most efficient and economical for destroying all sucking insects infesting vegetation

### ENGLISH NICOTINE—95-98 per cent.

Full directions for using as fumigant or spray fluid.

Prices on application.

### NICOTINE VAPORISING COMPOUND.

Nicotine content 50 per cent. In bottles for 2, 8, 16, 20, and 40 thousand cubic feet.

Prices: 1/6, 3/9, 7/6, 9/- and 17/6 respectively; ½-gallon tins, 61/-

### CAMPBELL'S PATENT SULPHUR VAPORISER.

For vaporising sulphur. The best method of exterminating Mildew in glasshouses. Apparatus lasts for years. 5,000 cubic feet size, 18/-; 10,000 cubic feet size, 20/- each.

Obtainable through your usual Chemist or Seedsman or, in case of difficulty, write the Manufacturer,

**J. D. CAMPBELL,** Nicotine Manufacturer, 5, Lund St., Cornbrook, Manchester.

### NICO SOAP (Nicotine Soap).

The best potash soft soap plus 7½ per cent. nicotine, for spraying or syringing work.

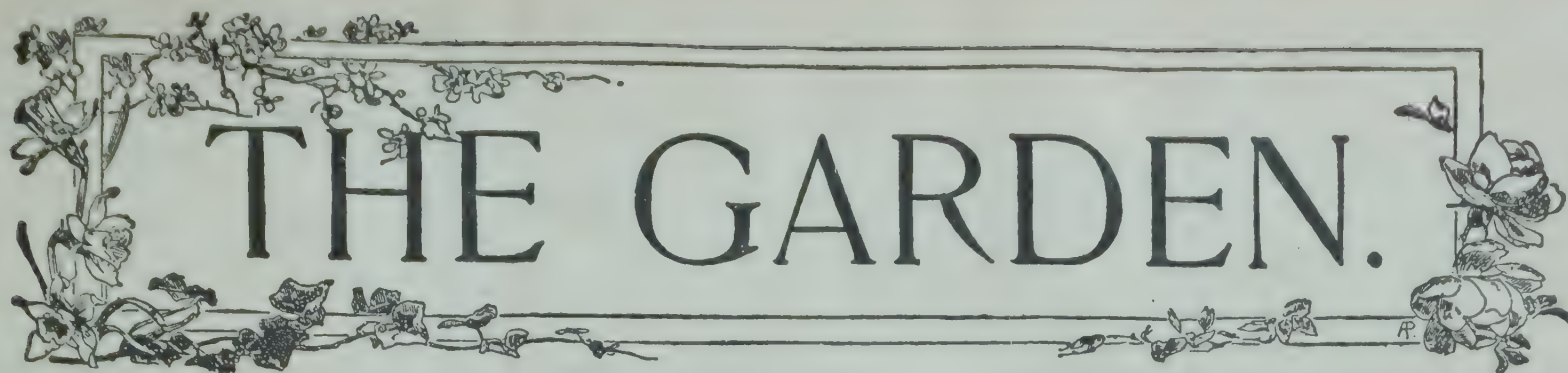
Prices: ½-lb., 2/-; 1-lb., 3/6; 10-lbs., 30/-

### CAMPBELL'S FUMIGATING ROLLS.

Very simple, for fumigating greenhouses. In four sizes for 500, 1,000, 2,000 and 3,000 cubic feet.

Prices: 7d., 10d., 1/6 and 2/- each.





# THE GARDEN.

Britain's Great Cabbage.

## WEBBS' EMPEROR CABBAGE.

The most popular Spring Cabbage. Earliest and best in cultivation. Remarkably free from any tendency to "bolt." Awarded Thousands of Prizes. 6d. and 1/- per packet; 1/9 per ounce.

"Your Emperor Cabbage was remarked upon by many visitors, not one bolting out of 2,500 plants."—Mr. S. J. Craze, Exlease Park Gardens.

Best of Vegetable and Flower Seeds for Summer and Autumn Sowing—Post Free.

WEBB & SONS, LTD., THE KING'S SEEDSMEN, STOURBRIDGE.

## WATERER'S FOR THE BEST IN BULBS

For Forcing, Bedding, Naturalising, etc. Autumn-flowering Crocuses and Colchicums. Our new illustrated catalogue is now ready. Post free.

WATERER'S ALPINE AND PERENNIAL PLANTS, including all the best in Lupins.

WATERER'S GOLD MEDAL RHODODENDRONS, Azaleas, and other hardy Shrubs, Yews, Conifers, etc.

WATERER'S NEW ROSE AND FRUIT TREE Catalogue, including all those varieties really worth growing.

New descriptive and illustrated catalogues ready shortly.—JOHN WATERER, SONS AND CRISP, LIMITED, Twyford (Berks), Bagshot (Surrey), and London.

## WAKELEY'S PATENTED HOP MANURE.

The original and only substitute for Stable Manure. See advert. on back cover.

## WM. DUNCAN TUCKER & SONS, LTD.,

Lawrence Road, South Tottenham, N.15.—Conservatories, Inter-districts, Vineries, Peach Houses, Portable Buildings, etc.

## WELLS' BATHS, GARDEN VASES, SUN-

SHEDS, NESTING BOXES. Catalogue (No. 4) free.—W. WELLS AND CO., 60, Buckingham Palace Road, S.W.

## WELLS' CATALOGUE OF CHRYSANTHE-

MS now ready, and will be sent post free on application.—W. WELLS AND CO., Merstham, Surrey.

## WELLS' THE BIRDS.—Rotless Tanned

NETTING. Small Mesh. As supplied by us to the Royal Gardens. In two qualities. 50yds. by 1yd., 4/-, 6/9; 2yds., 13/6; 3yds., 12/-; 20/3; 4yds., 16/-, 27/-; 25yds. by 8yds., 27/-, 27/- Any size supplied. Carriage paid; approval. Cheaper qualities, 3/6 50 yds., measured mesh closed.

## WIRE NETTING.—From 2/10 per 50yd. roll.

Nearest House in the Kingdom. Write us for prices. Thousands of rolls stocked. Raffia, 7d. lb., postage extra.

## WATERER'S GARDEN HOSE.—1/2 in. by 1-ply., 60ft., 17/6.

Carriage Paid. All sizes supplied.

## TENNIS BOUNDARY NETTING.—Lines top

and bottom, 25yds. by 2yds., 16/3; 3yds., 18/3; 4yds., 25/3. Carriage paid; approval. Standards for fixing to, also playing nets, poles and all requisites supplied.

## LAWN MOWERS.—Sale, 5 Riveted Blades,

with wheels, brass bushings, close cutting, highly finished, unequalled value, 8in., 20/9; 10in., 22/6; 12in., 25/-. Approval.

## TENTS.—Army Bell, All Complete, New

ittings, Deep Walls from 55/-. Scout Tents, 24.6. Garden, bathing, and all kinds of Tents and Marquees supplied.

## BAMBOO CANES.—3ft., 7d. per doz.; 4/-

per 100, postage 9d. Quantities cheaper. Deck Chairs, 3/9.—B. B. HAWTHORN, LIMITED, Dept. E., Shrewsbury.

## LAXTON'S STRAWBERRIES AND FRUIT

TREES.—Our Novelty List for 1925 is now issued, and contains new Apples, Raspberries, Currants, Strawberries, etc. All Garden Lovers should have this. Post Free.—LAXTON BROTHERS, Nurseries, Bedford.

## FENCING.—Chestnut Pale Fencing and

Garden Screening. Illustrated Catalogue on request.—THE TANGLE UNDERWOOD CO., LIMITED, 48, Shottermill, Haslemere, Surrey.

## RARE AND CHOICE DAFFODILS.—Our

list of fine New Seedlings, cultivated on our disease-free ground, now ready, and will be sent, post free, to applicants.—HERBERT CHAPMAN, LIMITED, Rotherside Gardens, Rye, Sussex.

## GARDEN NETS, tanned small mesh for Fruit

and Strawberry Protection, 30 yds. long by 2 yds. wide, 4/6; 5 yds. by 3 yds., 7/-; 30 yds. by 4 yds., 9/-; 30 yds. by 5 yds., 11/6; 30 yds. by 6 yds., 14/- All carr. paid.—COUSSENS & CO., Net Works, Rye.

## BARR'S SEEDS FOR JULY SOWING.—

HARDY PERENNIALS and ALPINES for the FLOWER and ROCK GARDEN and the most suitable VEGETABLE SEEDS for Summer sowing. Finest Selected Strains and Tested Growth. Special Lists Free.—BARR & SONS, 11, 12 and 13, King Street, Covent Garden, London, W.C.2.

## IRON AND WIRE FENCING FOR GAR-

DENS.—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—BOULTON AND PAUL, LIMITED, Norwich.

## COLOURED FREESIAS.—My New Price

List is now ready and will be sent on application to G. H. DALRYMPLE, Bartley Nurseries, near Southampton.

## FRUIT STORING STAND (PAT.).—Large

storage, small space, easy inspection, sound construction. Price List of Stand, also Cloches, free.—CHASE CONTINUOUS CLOCHE (7), Chertsey.

## CONTENTS.

	PAGE
Frontispiece: A Rose Garden .. ..	413
Plants for the Pathside .. ..	414
The Daisy Bushes .. ..	415
Hardy Orchids in Hertfordshire .. ..	417
Blue in the Garden .. ..	418
Summer Flowers at Vincent Square .. ..	420
Correspondence .. ..	421
Viburnums Carlesii and bithuiense; A Pronouncing Dictionary; A Climbing Rose; Aluminium Sulphate against Slugs; A Remedy for Earwigs; Trenching Clay Soil; Crinodendron Hookeri.	
The Saltaire Show .. ..	422
Sweet Peas at Westminster .. ..	422
Flowers at the Royal Show .. ..	424
The Windsor Rose Exhibition .. ..	424
Carnation Show .. ..	425
Obituary: Mr. E. Charles Buxton .. ..	425
Simple Gardening .. ..	426

## LOOK! TANNED GARDEN NETS.—All

orders despatched same day. 25yds. by 1yd, 2/-; 25 by 2, 4/-; 25 by 3, 6/-. All carriage paid. Any size supplied. Also Tennis Boundary Nets.—MOORE AND CO., Net Works, Rye.

## FRUIT GROWING LAND.—HEWITT & GATER,

Auctioneers, Southampton, are offering, on July 27th, 1925, upwards of 120 acres (in convenient lots) of the finest early fruit growing land at Sarisbury Green, midway between Southampton and Portsmouth, in the centre of the Hampshire fruit growing district, together with an attractive small residence and two very superior cottages. All the land and houses are freehold and vacant. Particulars and plans ready.

## BARGAINS IN GARDEN WIRE, ETC.!!

Government paid twenty times our price. Ideal for training Peas, Tomatoes, Fruit Trees, Arches, Logans, Beans, Hops, Greenhouses, Pergolas, Chrysanthos, Tying, Fencing, etc. Steel-stranded, waterproof covered, durable. 19/6 mile (full 1,760yds.). Small lots quoted. Get free Samples and list 300 bargains. Postcard to-day!—GREEN'S GOVERNMENT STORES, 213, Albert Street, Lytham.

## SIKKIM - HIMALAYAN ORCHIDS.—12

different grand-flowering sorts, 25/-; 6 different Cymbidiums, 24/-; 6 Renanthera Imshoottiana, 25/-. Post free in U.K. Catalogue free.—THE CHANDRA NURSERY, P.O. Rhencok, Sikkim (Bengal), British India.

## POULTRY BARGAIN, 300 month old White

or Brown Leghorns, 1/6 each, 18/- doz.; two month, 3/-, 36/-; three month, 4/-, 48/- doz. Carriage paid.—CONTI FARM, Stratford, Essex.

## LOAM.—Fibrous Yellow Turf Loam. Illus-

trated Catalogue Free.—A. B. JOHNSTON, New Park, Cranleigh, Surrey.

## MIXED DAFFODILS, good varieties, 4/- per

100, new.—CRADDOCK, Cullompton, Devon.

## SUTTON'S CABBAGES.

The best varieties for spring cutting are:

Sutton's Harbinger .. .. per packet, 1/- and 1/6  
Sutton's April .. .. per packet, 1/- and 1/6  
Sutton's Flower of Spring .. .. per packet, 1/-; oz., 1/6  
"I have never grown such lovely Cabbages as I have this Spring from your Harbinger seed. Of 5,000 plants not one bolted. I can strongly recommend Harbinger as the finest Cabbage in cultivation for Autumn sowing."—Mr. J. Parkins, North Hill.

SUTTON & SONS, THE KING'S SEEDSMEN, READING.

## BEFORE ORDERING BULBS, ROSES,

Sweet Peas, etc., you should procure a copy of our Autumn Catalogue, featuring latest Novelties, ready Mid-August. Apply now.—DOBIE AND CO., LIMITED, The Royal Seedsmen, Edinburgh.

## CHEAP GOVERNMENT WIRE !!!—Great

for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—GREEN'S GOVERNMENT STORES, 69, Albert Street, Lytham.

## GARDEN NETTING.—Best selected, small

mesh, tanned 25 by 4yds., 8/-; or 8yds., 16/-. Carriage paid. Tennis Nets and Standards. List free.—STRAWBERRY NETTING CO., 5, Suffolk Terrace, Lowestoft.

## FULL OF WISE SAWS AND MODERN

instances our catalogue offers all that is brightest and best for the present day garden. The choice plant at Sixpence a time may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—FEILDEN AND CROUCH, 2, Fairseat Nurseries, Wrotham, Kent.

## NEW ZEALAND PLANTS for Seaside

Gardens.—Pittosporum nigrescens for hedges, pot grown plants for planting now, 18/- per doz. Olearia Macrodonia, 1 1/2 ft., 12/- doz., splendid for hedges. Olearia Haastii, 1 ft., 12/- per doz. Brachyglottis repanda, 2/6 and 3/6 each. Clematis indivisa, 2/6 each. Ozothamnus 2/6 each. Muehlenbeckia complexa, 1/6 each.—TRESEDER AND CO., The Nurseries, Truro.

## SEWAGE DISPOSAL FOR COUNTRY

HOUSES.—No emptying of cesspools: a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—WILLIAM BEATTIE, 8, Lower Grosvenor Place, Westminster.

## PRIMULA AND ALPINE SEEDS from

choice (1,500 collection). Rare Seedlings and Rockery Bulbs. Lists free.—REV. J. F. ANDERSON, Glenn Hall, Leicester.

## GARDEN NETS.—Best tanned, small mesh,

25yds. by 1yd., 2/-; 25yds. by 2yds., 4/-; 25yds. by 3yds., 6/-; 25yds. by 4yds., 8/-; Carr. Paid. Satisfaction Guaranteed. Tennis Nets from 10/-. Special nets for tennis boundary. Pea training nets. Lists and samples free.—G. JARRETT, Net-maker, Rye.

## JAMES BACKHOUSE, F.L.S., F.R.H.S., for

many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to CAER FEGLA, Arthog, North Wales.

## THE WELSH BULB FIELDS were awarded

the Gold Medal at the Dutch International Show last April.—A list of Daffodils, Tulips, and other Bulbs will be sent on application to the Secretary, THE WELSH BULB FIELDS, St. Asaph.

## CHOICE ALPINE AURICULAS, DUKE OF

York, Emperor, Cranford, Borealis, Blue Bird, Majestic, 1/9 each. Prince of Tyre, 3/6. Muriel, 2/6. Meteor, Phyllis Douglas, 2/-. The ten, 18/6, posted. Good healthy plants, best type, and assured bargain.—H. GRANT, Chew Stoke, Bristol.

## GREENHOUSE PAINTING AND GLAZING.

—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7lb. tins, 4/-, pos (free); 14lb. tins, 5/6 each, carriage extra, tins free.—Full particulars from W. CARSON AND SONS, Grove Works, Battersea, S.W.11.



# REAMSBOTTOM'S ANEMONES

Gold Medal St. Brigid

(None Genuine without our Gold Medal Seal.)

12, 3/-; 25, 5/6; 50, 9/6; 100, 18/-

Plant now for bloom from late Summer onwards throughout Autumn and Winter.

Miss Campbell, Harewood, Seaton, Feb. 21st, 1925 writes:—"The St. Brigid Anemones I had from you (MAY, 1924) were VERY beautiful and are in bloom now."

Please write for Current Price List of Choicest Flowers for planting now.

PLEASE MENTION "THE GARDEN" WHEN WRITING.

REAMSBOTTOM & CO., TOWER NURSERIES,  
WEST DRAYTON, MIDDLESEX.



## Banish White Fly

Snow Fly on Tomatoes and Cucumbers can easily and safely be eradicated by means of Abol White Fly Compound. No apparatus needed. Simply pour the Compound down the centre path of the House at the rate of 2½ fluid ozs. to 1,000 cubic feet of space.

Sold in round tins as under. When reckoning quantity required allow ¼-pint for each 2,000 cubic feet.

Size	Price	Postage
¼-pint	1/-	6d.
½-pint	1/9	6d.
Pint	3/-	9d.
Quart	5/-	9d.
½-gallon	8/-	1/3
Gallon	15/-	2/6

Of all Nurserymen, Seedsmen, Florists, Ironmongers, Chemists and Stores. Abol Limited, 9, Beltring, Paddock Wood, Kent.

Write for descriptive Folder.

**Abol**  
**White Fly Compound**



## ADCO DEFIES THE DROUGHT!

The recent spell of dry weather has caused real anxiety to gardeners. Those who wisely turned last year's Garden Rubbish into **SYNTHETIC FARMYARD MANURE** are in the best position to-day. Soil organically manured always withstands drought for a longer period than that dressed with artificials alone. Next year may also be a dry one. If wet, you will still require organic manure. **Make it now.**

As refuse accumulates treat it with

### ADCO ACCELERATOR

if at least half consists of soft green materials such as lawn cuttings, cabbage leaves or green weeds; but when dead leaves, vegetable stalks, herbaceous border cuttings, prunings, straw and straw packing, form the bulk of the heap, use **Standard ADCO**.

If your dealer does not stock **ADCO** write direct to us, mentioning his name and nearest Goods Station. 1 cwt. of **ADCO** makes from two to three tons of manure according to the class of rubbish treated.

**ADCO Accelerator** .. 28 lb. 4/6, 56 lb. 8/-. 1 cwt. 15/-

**Standard ADCO** .. 28 lb. 6/- 56 lb. 11/6 1 cwt. 20/-

Carriage Paid to Nearest Station. Cash with Order.

**ADCO Ltd.,**



40 HARPENDEN, HERTS

## Notes from Maidstone.

### A HANDBOOK OF FRUITS.

By E. A. Bunyard.

The second and concluded volume of this work is now published, and contains the Stone Fruits, Cherries, Plums, Peaches, etc., and the Bush Fruits, such as Gooseberries, Currants, Strawberries, and Raspberries. May be obtained from us direct for 10/10 post free, or from any bookseller. Publisher, Mr. John Murray.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.

## HILL & SMITH, Ltd., BRIERLEY HILL, STAFFS.

Makers of  
**IRON FENCING, HURDLES, GATES, WIRE  
NETTING AND GARDEN IRONWORK**



Other Products—Hay and Grain Sheds, Dutch Barns, Galvanized Corrugated Sheets and Structural Steelwork.

Catalogues free on mentioning this paper.

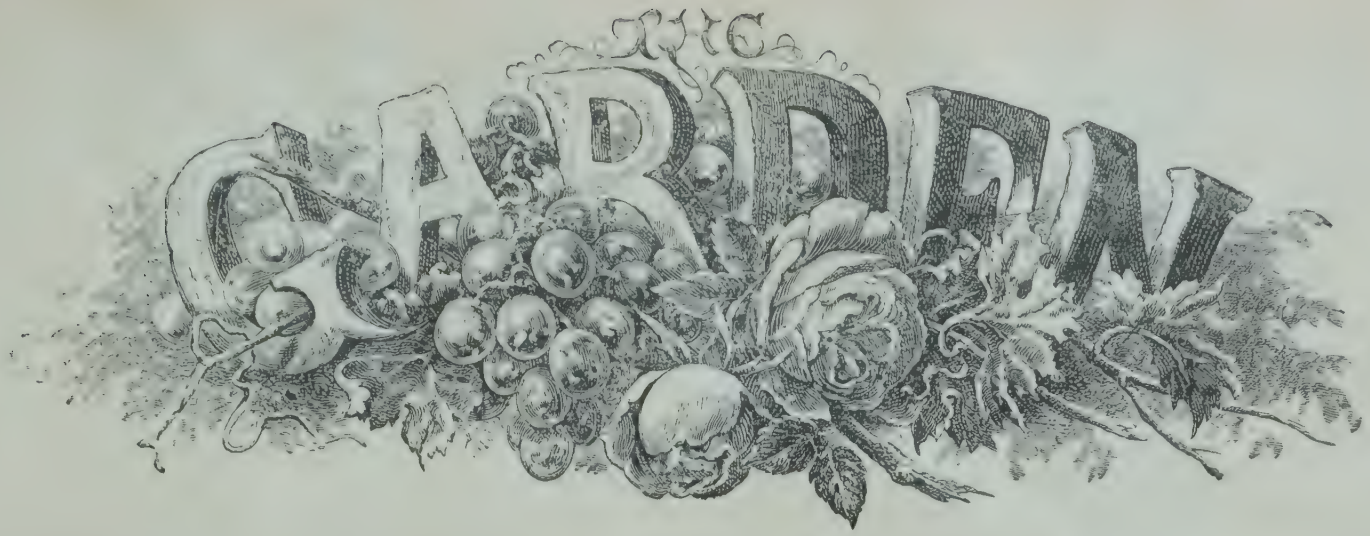
London: 300, Abbey House, VICTORIA ST., S.W.1

# BLOM for BULBS

**HYACINTHS for December and Christmas**  
**. . flowering ready for despatch NOW . .**

Apply for Catalogue to Messrs. J. C. WHITNEY & Co., Eldon Street House, Eldon Street, London, E.C., or to WALTER BLOM & SON (late of Overveen), Hillegom, Holland.





VOL. LXXXIX.—No. 2801.

JULY 25, 1925

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
*Editorial Offices:* 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. *Offices for Advertisements:* 8-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
 Entered as Second-class Matter at the New York, N.Y., Post Office.



A SIMPLE YET EFFECTIVE DESIGN FOR A ROSE GARDEN. THE APPEARANCE OF THE BEDS IS GREATLY ENHANCED BY THE GRASS EDGINGS AND THE RED BRICK PATHS, WHILE THE EFFECT OBTAINED BY COMBINING VIGOROUS GROWING STANDARDS ALONG WITH DWARF VARIETIES IS MOST ATTRACTIVE.



# PLANTS FOR THE PATHSIDE

THAT PART OF THE GARDEN FROM THE GATE TO THE FRONT DOOR IS PARTICULARLY SUBJECT TO CRITICISM, BUT IF A FEW OF THE UNDERMENTIONED PLANTS ARE INCLUDED THE RESULT SHOULD BE MOST GRATIFYING.

**I** OPEN the gate and any intelligent person would tell me that a few steps in space and a few seconds in time would find me at the front door. There is the path, perfectly straight, just a trodden brown earth path, there are no impedimenta, all is quite easy and simple.

But it isn't as simple as it looks, for the intelligent person was asked to look at the path and I see the flowers that are now growing in the beds at the sides, the flowers which have faded, but which I saw last time I passed this way, and more, those that will blossom before winter lays its hands on them all and sends them to rest.

There is the old apple tree leaning so gracefully and perilously because it is quite hollow, and over the hollow grows a Dorothy Richardson, kindly trying to cover the wound. The orange Dorothy buds smilingly lisp, "Don't notice the hollow," the older, cream-coloured roses say, "Please look at us and not at the sorrows of age." But their warnings are useless, for the gate made a noise as it opened and a tom-tit flies out of the hollow which is its home, or, at least, its summer residence. Silly bird, for Dorothy was doing her best to keep the secret of the tree's old age.

To the right is a Crimson Rambler, which had been budded on to a briar stock. The rambler never did very well, whereas the briar sent up branch after branch, until the gardener said, "Plucky, persistent little beast, its rough leaves are a jolly shape, anyhow. Let both the roses grow, let 'em fight it out." So there they are, together and so unlike. Under the earth they have a common dining-room, but up in the air their leaves take their aerial nurture independently.

The two plants react differently to moisture and sun and cold. The briar leaves come out first and drop first. When the leaves of the rambler are a little wilted on hot days, those of the briar still hold themselves proudly alert. When a frost comes the rambler succumbs, but the briar proudly displays a few very fat, red haws, while its leaves become bronzed or red or orange, before they pass away and leave the plant brown and bare. But if a few mild days come in November, or even in December, the rambler may unfold pale leaves and even experiment with a few green rose buds. Then the wise old briar, like a canny Brer Rabbit, "ain't sayin' nothin'." Inside its prickly brown stem it is amazed and rather scornful of the foolish adventurous ways of the upstart Crimson Rambler, which evidently has no well established tradition as to the correct behaviour of roses in November and December. This young thing, with so recent a family history, evidently has a mind which is easily led astray by December masquerading as May.

The blood red, small, dainty, tidy blossoms of the rambler, and the large, irregular, fade-red of the briar, do not go well together. This hybrid plant is not really proper to have in the garden, but there they are, two children whom life has produced. They shall do as they like, or as they can. Year

by year the gardener will watch, and perhaps some day he'll know which is the winner.

At my feet is a great tussock of sea thrift (armeria), a plant that is beautiful every day of the year. I am not sure whether I like it better when it crouches by the path like a round, green hedgehog, or when, for a few weeks, it is like a great green cushion stuck with lovely pink-headed pins; then it is full of memories: Cornwall, a high cliff, a blue sky, a bluer sea and pinkness everywhere, not only in easy places, but there are little bunches of pink on tiny dangerous ledges, masses of pink on pieces of cliff that are just going to fall down into the sea, pinkness growing among pebbles on an inhospitable old raised sea beach. This thrift had a great adventure. A community of ants made a home near its roots and threw up a mountain of earth and ant eggs into the middle of the plant. It was cleared away several times, but the ants were so persistent, that finally the ant mountain was allowed to protrude from the middle of the green tuft. That little area of earth was not long allowed to remain a desert in a country so full of seeds; first a lesser crane-bill grew into a pretty rosette, but it did not produce a flower, then a columbine made a start, but it did not get beyond three of its tiny frilled leaves, finally a spiked valerian usurped the minute desert, and now has one little blue spike proudly sitting in the midst of the pink-headed pins.

Next door, clinging closely to the ground, is a plant of dwarf mountain thyme. It covers the earth in a thick, tight way that paint covers wood. Just before it comes into blossom it has a very cosy appearance, for the buds are protected by a fine down which makes the little patch look like a miniature purplish-green blanket. Soon the flowers will be out. Then I shall stay a long time by the little plant, to see the rich reddish purple of the tiny petals and I'll lean over to break off a minute leaf that the air may be luscious with summer fragrance.

The patch of lungwort (pulmonaria) leaves is getting rather shabby. I am sorry when their time for rest comes, because I am so grateful to that little plant for producing its simple protean flowers so early in the year. Most flowers come when flowering seems so easy and so simple, for they come into a warm and sunny world, but the lungwort pushes its delicate, blue-red, red-blue flowers out of a hard earth and into an air which may get nasty tempered at any moment.

There is a fascination in these flowers, which are pink or blue and which change from one colour to another, like a chameleon in the tropics. Even their full calyx is good to look at when the flowers have fallen. I have a special copper cup in which these flowers find a place year after year. Lungwort is not one of the gorgeous flowers, but it is well worth growing for its quaint, spotted leaves and its early bravery and delicacy. I would like to know how people prepared it for the curing of lungs in the old days. I wonder if it ever did any good. But it is certain that the mother was glad to do something that might be useful to the suffering husband or child,



SEA PINKS BORDERING A NARROW PATH.



and the sufferer was grateful to have any treatment to break the ennui of the long hours of waiting for the return of peace and health.

All the plants which have been used as medicine have a special human appeal; suffering is and has always been so near, so inevitable, that we cannot but look upon these helpful plants as friends and comforters. Lungwort was supposed to be good for the lungs, because its leaves have the spotted appearance of diseased lungs, just as greater celandine was good for biliousness, because its juice was yellow. I wonder if, on the same principle, they cured drunkards by letting them consort with other drunkards and turned bad-tempered folk into sweet-tempered by housing the villains together.

Somewhere in the background is a leopard's bane (*doronicum*), a lovely, gay plant, each blossom a foretaste of summer, each flower an August sun in April. It has, like all plants, its own proper and orderly time of flowering, but also an erratic, disorderly habit of producing a flower or two in August and one or two even in December. One wintry day you go out to see the garden, now like an old lady wrapped up in grey and brown, and you find one patch, perhaps two patches, of colour. One noon the wintry sun winked at the *doronicum* and as a result the plant suddenly produced two flowers, not gold, but making an effort towards goldiness. Gather them quickly, lest a frost curl up the petals and brown their tips, put them in a little green glass vase and stand them on the mantelpiece above the bright December fire. The fog may be thick, rheumatism may give you twinges, your nose may be red from a cold, but the little flowers sing a spring song which only the very stupid cannot hear. Even the flames of the fire hear and are apologetic, knowing what a poor substitute they are for the warmth and light of a May sun.

The lupins have been cut down, but their palmate leaves are busy, wide open by day, partly shut by night, but always breathing, breathing, storing up food for that time when each plant will send up its light, hollow stems to produce, one, two, three church spires, graceful like the spires of Coventry, Salisbury, but not quite as light and wonderful as the lace



WHITE CANTERBURY BELLS, NEITHER ARISTOCRATIC NOR PLEBEIAN.

snow-white heart which stare at you, demanding allegiance, even obeisance, but which never become familiar, loving. How different from the hare bell, which seems just about to die of love and love for you alone.

The Canterbury bell on the other side of the path is somewhat betwixt and between the independent *anchusa* and the amorous harebell; it is a cosy, welcoming, homelike flower, willing to let all share in the blueness of its deep cup. Its five petals smile up at you as they turn back from the edge and show the yellow treasure. The humble bee is welcomed into the blue velvet boudoir, but, restless creature, he never stays long and yet he looks so sluggish and lazy. It is just possible that in his search for gold, he did not look round the blue room; probably thieves do not usually take an interest in the artistic furnishings of the houses they rifle.

The pink Canterbury bell is a delicate, sweet lady, but looks rather frail beside her blue cousin; the humble bee seems like a little bear when he visits her, much too rough in his manners for such an aristocratic lady, for she is Marquise La Rose, having risen socially above her family, who for generations have been merely Mr. and Mrs. Blue. The white Canterbury bell is neither aristocratic nor plebeian, but a strange and not very satisfactory exotic, whose complexion easily turns into an unpleasant brown when hit by a rough or cold wind.

As I leant down to look at a black and yellow ladybird on a grass plant, I heard a voice: "So you have come. We thought we heard the gate shut, but that was a long time ago."

O. A. MERRITT HAWKES.

## THE DAISY BUSHES

BY SIR HERBERT MAXWELL.

*The olearias or tree daisies of New Zealand consist of about forty species, with, in addition, a number of fine hybrids, the majority of which remain unsurpassed for their beauty of habit and profusion of blossom. As Dr. Cockayne, the eminent botanist, has said in one of his books, "their value for garden decoration equals that of the veronica." They fall naturally into two or three groups, which include species suitable for planting in gardens near the sea where moisture is plentiful, or in rocky and rather dry areas, or again, at the other extreme, in swampy positions. A wide range is thus offered in their cultivation, and with their handsome and striking appearance and charming flowers, they are deserving of being more widely cultivated in our gardens.*

ALTHOUGH most of the shrubs from New Zealand, especially those from the North Island, will not endure the rigour of winter in midland Britain, yet there are wide tracts of our country—practically all parts near the sea—where many of them flourish as freely as in their native land. Among these are the daisy bushes—olearia—than which there is no class of evergreen that flowers more profusely,

none better fitted to relieve the monotony which too commonly prevails in private shrubberies and public watering-places, none less exacting in cultural requirements where the climate is mild enough to suit them. The hardiest of the genus is *O. Haastii*, which endures even the trying extremes of heat and cold of London, and is pretty generally known and grown. It shrouds itself with a cloud of white blossom in August and

like spire of *Ulm*. The lupin paints her spires blue or blue and white, but man does not dare to paint the spires that he has made. Sometimes, however, the sun, when it draws near its setting and becomes friendly to man, so friendly, indeed, that man may look him full in the face, will pain the human spiret gold or yellow.

And here's another blue, *anchusa*, queer, straggly plants, hardly ever really erect, bearing in a thoroughly untidy manner its impudent and glorious blue flowers, those flowers with a cold,



may be grown as a useful hedge plant near the sea ; but, like all the other species, must be protected against rabbits.

*O. chathamica* and *O. semidentata*, both from the Chatham Islands, are reckoned among the tenderer species, yet the former grows well in the open in the Edinburgh Botanic Gardens, which are not blessed with a languorous climate. As for *O. semidentata* I cannot speak with any certainty, for I think that the plants we have grown under that name at Monreith are a narrow-leaved variety of *O. chathamica*. Both are very desirable shrubs, with thick, leathery, ever-green leaves and large solitary flowers, those of the latter having white or pale mauve ligulate rays round a dark violet centre, while the ray florets of *O. semidentata* are described as purple.

One of the tallest and most ornamental species is *O. macrodonta* sometimes erroneously called *O. dentata*, which is a tender Australian species. It may grow 20ft. high and makes a beautiful appearance when loaded with broad corymbs of small white flowers. It is sometimes confused with *O. ilicifolia* (holly-leaved), but its foliage is much broader and more like a holly than that of *O. ilicifolia*, whereof the leaves are linear-oblong or lanceolate. The two species are equally ornamental, growing to the same height and diffusing a similar musky fragrance when bruised. I used to wonder why, notwithstanding the vast quantity of feathered seeds that float away from these and other species of *olearia*, it was so seldom that one came across a self-sown seedling, nor was it until quite lately that the reason was found. A piece of ground having been cleared for the erection of a tool shed, many scores of seedling *O. macrodonta* colonised it, as no doubt they would do any bare ground not under tillage.

*O. nitida* is a very handsome evergreen, bearing plenty of large, rounded corymbs of white flowers in May and June.



ONE OF THE MOST ORNAMENTAL SPECIES, *OLEARIA ILICIFOLIA* WHICH THRIVES IN A SHELTERED POSITION.

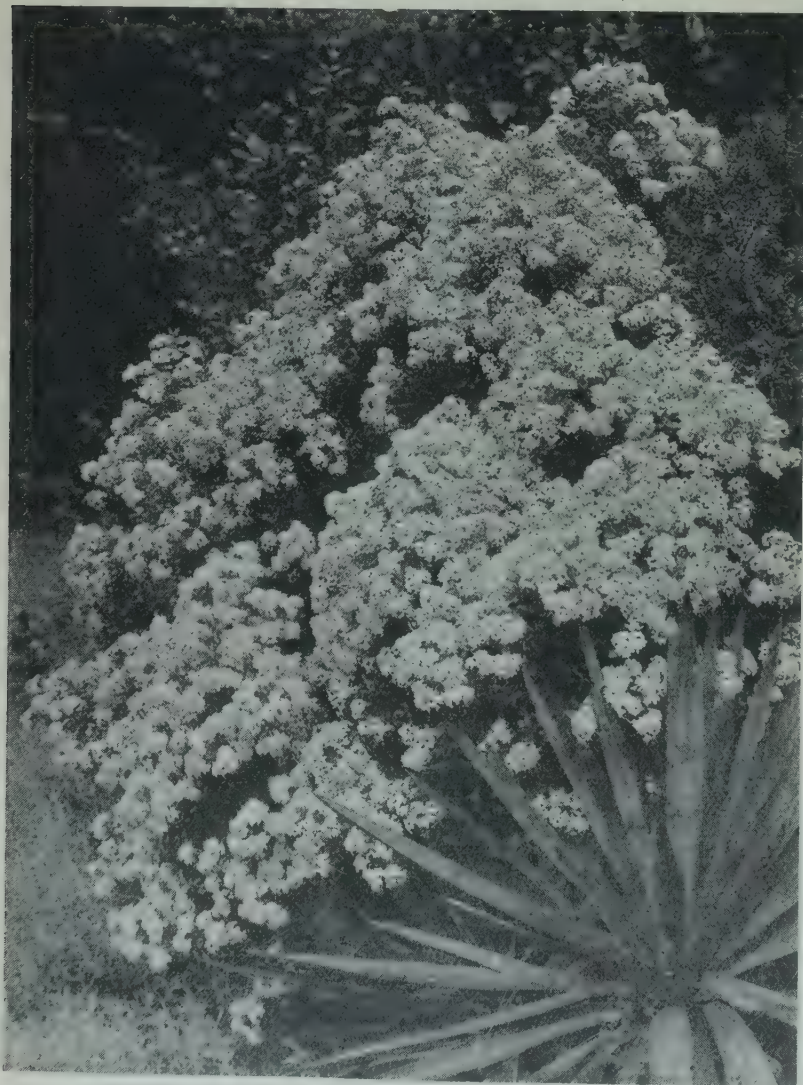
The leaves vary from 1½ ins. to 3½ ins. in length, bright green and shining above, white and satiny beneath. Inferior in beauty to this species is *O. avicenniæfolia*, but valuable in that it defers flowering till August. *O. Colensoi* is well worth growing for its fine foliage, the leaves being 6 ins. long, very thick and leathery, shining green above and white below. The flowers are rayless, brownish purple, and are borne in racemes. Cheeseman reports this fine species as growing 30ft. high. *O. Traversii*, from the Chatham Islands, grows equally tall, with leaves 1½ ins. to 2½ ins. long, but it is a disappointing shrub, bearing flower panicles in profusion, but the flowers are rayless, greenish-greyish-yellow and inconspicuous, altogether not desirable for ornament.

Very different in appearance from these large-leaved species is *O. nummularifolia*, a stout, densely branched shrub which, so far, stands 6ft. high at Monreith and as much in width. Its white-rayed flowers are not borne in the same lavish profusion as those of several other species, but its foliage entitles it to a good place, being of a rich olive green. The rounded leathery leaves, never more than ½ in. long, are closely set along the branchlets with revolute margins.

*O. stellulata* or *Gunniana*, from Tasmania, are so nearly alike that I cannot pretend to distinguish between them. They (or it) cannot be accounted as hardy as the species mentioned above, but they flourish freely in maritime districts, being covered with pure white blossoms in May and continuing much longer in bloom than any other species known to me. In stature they do not seem to exceed 4ft. or 5ft. *O. insignis* is reported as high as 6ft. in New Zealand, but I have not seen any specimen more than half that height in this country. It differs remarkably in appearance from any other daisy bush, having earned its specific name *insignis*—"distinguished"—by reason of its great leaves and large white flowers, 2 ins. to 3 ins. across. Being native to the South Island of New Zealand it is probably hardier than it gets credit for ; at all events, I have seen it growing happily far from the sea in Sussex.

Different again from all other forms of *olearia* is the group represented by *O. virgata*, of which the small, narrow leaves are set along the slender branchlets in opposite fascicles, giving the shrub a plume-like appearance. This completes the list of daisy bushes whereof I have personal experience ; but there are others among the five and thirty species of *olearia* indigenous to New Zealand which seem to be worth planting. Among these is *O. lacunosa*, with narrow leaves 6 ins. and 7 ins. long, about which Mr. Cheeseman observes that "its singular foliage should induce horticulturists to make the attempt to grow it!"

*O. Lyallii*, from the Auckland Islands, reaching a height of 30ft., with leaves 8 ins. long ; *O. Traillii*, *angustifolia* and *fragrantissima*, from the South Island, seem to be desirable subjects.



*OLEARIA HAASTII*, THE HARDEST OF THE DAISY BUSHES,



# HARDY ORCHIDS IN HERTFORDSHIRE

ORCHIDS of various types are plentiful in this country and they, of course, are of much interest to all lovers of our native wild plants when met with. There are no fewer than a dozen varieties that I have discovered myself in a radius of ten miles. They are found in the woods, pastures, chalk hills and moist meadows, according to the type and their requirements. I have noticed that practically in every case one species is never alone, but usually one or two other species are close at hand—in one instance about nine species are growing in a quarter of a mile radius; this I consider is an exceptional piece of rich flora.

We find *Orchis Morio* in abundance in the moist turf, in all its varying handsome shades; from the deepest purple to the palest blush pink, with very many intermediate shades, of which the delicate salmon pinks are favourites. Pure white forms and creamy also occur, but these are rare with us. The common name "Green Winged Orchis," describes beautifully the feature of the flowers, whose two side petals or wings have lines through them of a bright green colour. The flowers are carried on spikes a few inches high, from a tuft of sturdy dark green leaves.

*Orchis mascula*, known as the Early Purple, abounds in great numbers; usually in moist, shady places. The woods appear to produce by far the best specimens, where the flower spikes attain a height of a foot or so, carrying the deep purple blossoms, and the leaves are long and fat, showing the results of a comfortable home. The leaves are conspicuous by the myriads of dark brown spots that share the upper surface, in odd cases the leaves are spotless. The colour of the flowers does not vary very much, and it is in very rare instances that an albino is observed.

In similar positions we find the Twayblade, *Listera ovata*, with its broad, oval, heavily veined leaves, that are situated two or three inches from the ground on its round stem. Only two leaves are produced on one stem and they are directly opposite. From the middle it throws up its 6in. to 9in. flower spike, carrying many curious green flowers which are certainly more quaint than pretty. It does not form tubers, as do the two preceding items, but forms dense mats of fleshy roots.

*Habenaria viridis*, the Frog Orchis, is again not very handsome to look upon, having small green flowers on 6in. stems, but this is not very common. Its leaves are long, narrow and bluntly pointed, and palmate tubers are formed.

*Habenaria bifolia*, the Butterfly Orchis, is fairly common in the woods, where it produces a pair of opposite, glossy, pale green lily-of-the-valley-like leaves. Several large flowers are carried on a

12in. stem in May and June. They are a creamy colour, the petals being arranged to present a starry appearance, and possess an extremely long spur in the rear, but the likeness to the butterfly is rather distant. The flowers give off a delicate sweet perfume, which is most pronounced at the close of a warm day. The tuber it makes is long and runs out to a point.

*Spiranthes autumnalis*, the Autumn Lady's Tresses, seems rather uncommon. It is quaint, yet handsome in its way, with numerous tiny white flowers arranged in a single row that winds round and round the 3in. slender stem in a spiral manner; they are also fragrant. After flowering it forms a rosette of short, sturdy glossy green leaves which sit perfectly flat and do not exceed an inch

6ins. to 12ins. high in June and July. It forms oval tubers and has bright green leaves up to 6ins. in length by about 3in. in width.

*Orchis ustulata*, the Burnt Orchis, is in flower at the same time, and also occurs in chalky districts, but is not so common by far. It is a neat and curious little orchid, very dwarf in habit (3ins. or so), with between ten and twenty small flowers thickly placed on short spikes. These are of a deep purple colour and a lip of white, spotted with purple, contrast greatly and break the monotony of a dull shade. Small oval tubers are also produced in this instance.

*Gymnadenia conopsea*, the Sweet Scented Orchis, is a species the scent of which is one of the chief features, being extremely sweet and fragrant.

It inhabits the dry, hilly pastures in the vicinity of chalk, and its rosy flowers on dense slender spikes poise gracefully above the short grass. The flowers appear in June and many constitute a spike. The foliage is long and narrow and the tubers it makes are palmate with four or five points or fingers. Creamy white forms are rarely found and they are quite good.

*Epipactis grandiflora* (the White Heleborine) rarely frequents our woods where chalk is in evidence. Its dull green lanceolate leaves clasp its 18in. stems at short intervals and from the axils its sessile, creamy-white flowers, yellow lipped, are produced during the months of June and July. For some reason or other the flowers fail to expand themselves as much as would be anticipated, and therefore do not show off to the best advantage. The plant does not form tubers but, instead, makes a dense bundle of tough, wiry roots, and lies perfectly dormant in winter, whereas most of the preceding items are in leaf at that time.

*Orchis pyramidalis* is a handsome species having extremely fine and beautiful flowers, usually of a clear rosy pink. Variation does not seem very general, and only on odd occasions have I witnessed pure white forms. The flowers are densely arranged in a pyramid-shaped head which tops a 6in. stem. Leaves are deep green, long and narrow, and make a tuft hardly rising above the short grass in which they are found. Sunny positions on poor chalky ground appear to be their ideal habitat. Flowers June and July.

*Orchis maculata*, the Spotted Orchis, is one of the commonest, abounding in great numbers in the moist pastures and meadows, and sometimes in woods. The usual colour is a pinky white, but there are specimens that are pale pink, also dead white. In all cases the flowers are markedly spotted and are produced in compact heads about a third of the length of the stalk.

F. BARKER.



THE WHITE FORM OF THE SPOTTED ORCHID.

in height; these remain so, until shortly before the next flowering period, when they wither away. Two or three ovate tubers are formed underground in a cluster. It is autumn flowering.

*Ophrys apifera*, the Bee Orchis, has numerous stations in Hertfordshire, and is usually to be found in a chalky neighbourhood, where it occupies sunny aspects and dry positions. It is quite one of the favourites and certainly very popular, with its handsome flowers, made up of three rosy-lilac petals and a lower lip of a dark brown colour water-marked, as it were, a lighter brown shade. The edges of the lip are rolled backwards slightly and at once give the appearance of a velvety bag or pouch, strongly resembling the body of a bee, hence its name. The flowers are borne on spikes



# BLUE IN THE GARDEN

WHO does not love blue? The colour chosen by the Roman Catholic church for the robes of the Madonna and typified by the expression "vouée au bleu," given to little maids in France to signify their devotion to the central figure of their religion. When Maeterlinck sent the children Tytyl and Mytyl in his fairy play in search of the wonderful lucky bird, did he not choose blue for its plumage? So in the garden blue is the colour most prized by gardeners; partly for the sake of the colour itself and partly on account of the supposed scarcity of blue flowers. During the early months of last year *The Times* had an article from the pen of their garden correspondent on this subject, and though he seemed to me to be unnecessarily strict in his definition of blue, as applied to flowers, his remarks about catalogue descriptions of blue flowers were very much to the point. The blue rose, for instance, with its dingy mauve flowers and the well known *Gladiolus Baron Hulot*, could not be considered blue by the wildest stretch of imagination.

We must try to arrive at some sort of definition of blue in this connection. Science simply divides up white light into three primary colours, red, yellow and blue. But the extreme blue end of the spectrum is often referred to as violet and the expression "ultra violet rays" has quite a definite meaning. If we, therefore, admit all flowers which are blue according to the scientific definition of this colour and exclude all those which have much red in their composition, we shall find that we still have quite a long list.

When I speak of *blue in the garden* I do not mean that we are to have none but blue flowers, but rather that the dominating note might be blue, bearing in mind Whistler's stinging retort to the critic of his symphony in white: "Bon Dieu, did this wise person expect white hair and chalked faces? And does he then, in his astounding consequence, believe that a symphony in F contains no other note, but shall be a continued repetition of F, F, F? . . . Fool!!"

Blue in the garden can easily be overdone, as a correspondent, writing from Norfolk in reply to the article mentioned above, was only too ready to admit, as "the resultant effect was too cold, at all events for an English summer." If properly managed, however, there is nothing lovelier than blue in the garden. From early spring to latest autumn we can have bold patches of blue set among the green of leaves, like a sapphire in a ring. Only a few weeks ago I came across such a patch in Nature's own garden, composed of numberless spikes of bugle (*Ajuga reptans*), a plant which is well worthy of a corner in the rock garden, especially in the variety with variegated leaves, which show off the blue flowers to the best advantage.

Who cannot call to mind a beechwood in early spring, with the sunlight glinting through the boughs, with their tender young green, on to patches of bluebells growing thickly beneath?

The first blue effects of the year are, in fact, obtained by the judicious use of small bulbous plants, such as the grape

hyacinth, scillas, chionodoxas and puschkinias. Perhaps, too, we may add the crocus, though the flowers are a bit purplish. Then come the hyacinths, which I like to grow in tubs close to the house so that their scent may enter the open windows.

Very early the blue anemones come into flower. First of all one from the hills of Greece, closely followed by its neighbour from the Apennines, with its astounding roots like bits of knotted charcoal. Then there are the little hepaticas, so common in the woods of Switzerland. The blue of the St. Brigid and the poppy anemones cannot compete with these little wild species and are best grown mixed together with the gay red shades in a border by themselves.

Early in the year, too, come the blue primroses, raised from seed each alternate year, for the colour is not fixed. If this is not done they revert to purplish shades. A packet of mixed seed from one of the large seed firms will yield a goodly assortment of shades from pale to deep violet blue. They often come like polyanthus, several on a stem. The true blue primrose was, however, discovered by Winter and named after him. He tells us how he found it in the Himalayas "growing at the edge of the snow, a patch of blue, looking lovely with the rising sun shining on it between the trunks of the trees, in delightful contrast with the white of the snow and its whitened leaves. It was a primrose with twenty or thirty blooms; at that elevation (10,000ft.), and with that clear atmosphere, really blue without that mauvish tint which it has chosen to assume in duller England."

It is to annuals or, at any rate, to small plants raised from seed that some of the best blue effects in the garden are due. Many of them when once established can be relied upon to look after themselves year by year. Thus a blue haze composed of myriads of the small blue flowers of the forget-me-not creeps over the garden. It is the forget-me-not family which provides us with by far the greatest number of really intensely blue flowers.

As the forget-me-nots grow pale and finally fade away the blue violas come into bloom, edging all the paths and running along the side of the lawn. Some of them are, perhaps, not quite blue within the definition, but the impression produced is certainly one of blueness. If the dead flowers are removed, these violas will keep the garden gay with blue all the summer through.

The effect is very greatly enhanced by mingling the untidy, straggling *nemophila* with the violas. This little pure blue flower, with its white centre, set off by the dark anthers of its stamens, has a great fascination for me. A fitting companion for this little plant is another small annual, *Phacelia campanularia*, which holds up its dark blue cup-like bells to the sun. Like *nemophila*, the anthers form the chief decoration of the flowers, but in this case they are white, and the interior of the cup is also decorated by five symmetrically placed white spots.



THE INTENSELY BLUE ANCHUSA IN A CHARMING SETTING.



Love-in-a-mist, with its pale blue flowers half hidden in a veil of green, must find some little corner in our garden, for its quaintness and old times' sake.

Though one cannot hope to get on a small scale in the garden that wonderful effect of a pale blue sea given by a field of flax in full bloom, the plant is well worth growing for its dainty pale blue flowers poised on slender upright stems. How many of us connect this plant with "flaxen hair," from the colour of dressed flax, or with linseed oil which is obtained from its seeds?

Apart from the small bulbous plants of early spring, the rock garden cannot boast of very many blue flowers, though the few there are make up in quality what is perhaps lacking in quantity. Both the little spring gentian (*G. verna*), with its flowers like little blue stars and the much larger stemless gentian (*G. acaulis*), with its great blue trumpets should both be included. *Lithospermum prostratum* is to the rock garden what *anchusa* is to the borders, one cannot say more. Then there is *Eritrichium nanum*, which Robinson calls the fairy forget-me-not. It is said to be very difficult to manage. *Omphalodes*, too, with its ugly name, but lovely blue flowers, must find a shady corner. I had almost forgotten to mention the alpine columbine, an account of which we read in *THE GARDEN* last April.

There are also several quite blue veronicas which take their place on the rockery and especially one with bright yellow leaves, which make the flowers look even more blue than they really are.

Turning now to the larger herbaceous flowers of the border, June is the month, *par excellence*, in my garden for blue, for it is then that the lupins are at their best, every shade of blue to the deepest violet, planted all together in a little bed, surrounded by a crazy paved path with steps all on different levels. In the centre of this bed the taller delphiniums rear their stately spikes. Maeterlinck calls the delphinium "the rough larkspur, in his peasant's blouse who thinks himself more beautiful than the sky, looks down upon the dwarf convolvuluses, who reproach him spitefully with putting too much blue into the azure of his flowers." As if that were possible. In another corner the *anchusas*' intensely blue flowers form an effective background for the pink lupins.

The iris garden, too, has many blue flowers to show at this time of year. We have not space to call them all by name, and perhaps it would be invidious to single out any one for



THE QUAIN LOVE-IN-A-MIST WITH ITS PALE BLUE FLOWERS ALWAYS LOOKS WELL IN AN OUT-OF-THE-WAY CORNER.

special mention. Several of the Indian poppies (*meconopsis*) have blue flowers and one must not leave out Jacob's Ladder (*Polemonium coeruleum*), with its pretty pale blue flowers with their delicate yellow stamens to set them off.

Later comes a whole assembly of herbaceous flowers on the border line of blueness, not blue as compared with either delphinium or *anchusa*, but quite blue when seen apart from them. Scabious, with the lovely *caucasica* for those who can grow it, Michaelmas daisies and the whole *campanula* family—both the larger plants which adorn the borders and the dainty little bells of the rockery.

In tubs on the terrace of the mansion, blue hydrangeas and agapanthus, the blue lily from Africa, are for the wealthy with glasshouses in which to winter these aristocrats of the summer garden.

For the parterre we have the wonderful *Salvia patens*, another member of the aristocracy too tender to spend the winter out of doors. Then there is the humble little lobelia brought from a coster's barrow to edge a bed on a suburban lawn or to form a pleasing contrast to the geraniums in a town window-box.

Of climbing plants there are several of the larger clematises with blue flowers and a curious little one with bunches of pale blue blossoms, which is *Clematis Davidiana*.

We must not omit to mention the blue convolvulus, with its beautifully shaped cup-like flowers. Unfortunately, like the blue rose, the blue sweet pea has yet to appear, though you will find Mrs. Tom Jones described in the catalogues as "bright delphinium blue"!!

The herb garden is not without its note of blue. Here is borage grown for claret cup and hyssop with its biblical reference:

"And ye shall take a bunch of hyssop, and dip it in the blood that is in the bason, and strike the lintel and the two side posts with the blood that is in the bason."

What shall we say of blue in the garden in winter? Have we not the blue tits flitting from coconut to bare bough and back again, thus keeping a touch of blue in the garden till the spring bulbs come into bloom, when that small patch seems to become a perfect carpet of delicate blue made up with the numerous nodding heads of bluebells.

EDWARD CAHEN.



THE BLUE HIMALAYAN POPPY WHICH IS SO EFFECTIVE IN THE SEMI-SHADE OF WOODLAND.



# SUMMER FLOWERS AT VINCENT SQUARE

**Q**UITE a dazzling colour display met the eye on entering the R.H.S. Hall at Vincent Square on the occasion of the Fortnightly Show held on July 14th, and the collections staged were fully representative of the season of the year. Two societies, the National Carnation and the Cherry and Soft Fruit Society, held their annual exhibition in conjunction with this meeting, and their exhibits greatly enhanced the general display. Considering the prolonged drought which has been experienced throughout the country in general during these recent weeks, the standard of the exhibits and the tones of colour of the blooms were really excellent. Chief among the floral displays were the magnificent stands of sweet peas with their blaze of colour, while carnations and roses followed not far behind. Herbaceous flowers were much in evidence, and gave that rich vivid colouring which is so warm and pleasing

Föch, Evelyn (deep pink) and Europa (white with a mauve pink eye).

An interesting exhibit was that staged by Mr. Ormiston Roy of Montreal of peonies grown in Canada. None of the varieties were named, but several appeared to resemble those on this side. It certainly was not apparent from the fine condition of the flowers that they had withstood a journey from Canada in cold storage. This fact serves as another striking example of how well some plants will carry over long distances uninjured.

Fruit was also well represented, and provided a tempting display. Messrs. Bunyards staged a fine exhibit of cherries, while Messrs. Daniel Brothers showed their new late black currant September Black, and Messrs. Seabrook the well known variety Seabrook's Black and a fine variety of gooseberry (Whinham's Industry). Strawberries

rarer campanulas, and for Zoysii most of all. With it were shown *Campanula kewensis* a hybrid of *C. excisa* and much cosier, with jauntily twisted petals of violet blue; *C. Wockii* another hybrid with stiff, grey-green leaves and starry lavender flowers and *Anagallis tenella*, our rare native bog pimpernel, covering a close green mat with delicate pink cups veined with red.

Messrs. Wood of Ashted made a very pleasant decoration in cool primrose yellow, white and lavender, with dwarf evening primroses (*Enocheras riparia*, *Fraseri* and *missouriensis*), white campanulas and a new nepeta, Paul Chandon, which received an award of merit. *Nierembergia rivularis* was shown covering itself with pearl white cups, which, oddly enough, have the scent of the river mud in which it grows by the La Plata. In our cooler climate it prefers a better drained situation.

Messrs. Reuthe showed a number of campanulas hiding shyly under the semi-tropical shrubs: *Campanula Raddeana*, beautiful in its deep violet, but inclined to be rather lank and awkward in habit; *C. cæspitosa*, a very small and charming form of *C. pusilla*, but not the true plant, which is probably not in cultivation and *C. valdensis*, dark purple with rather hoary foliage.

Messrs. Waterers showed some pleasant St. John's worts, *Hypericum cuneatum*, whose mahogany red buds contrast with its glaucous leaves and enhance the golden yellow of its blossoms; and *H. olympicum citrinum*, a good sulphur yellow form; *Campanula turbinata grandiflora*, whose flowers are really too large for the plant and look like inverted umbrellas.

In the cherry and soft fruit show, under the auspices of the Fruit and Vegetable Committee of the Kent Branch of the National Farmers' Union, the large numbers of exhibits of cherries gave evidence of the keen interest which growers take in the culture of this choice dessert fruit. A cherry and soft fruit show, such as this, provides opportunity for fruit farmers to discuss questions of mutual interest and does much to maintain a high standard.

The fruit was perfect in condition and excellent both in shape and quality. Cherries, gooseberries and black and red currants were exhibited. Several silver challenge cups were awarded, as well as many prizes. In Classes I and II the Norton Orchards, Limited, won first prizes for cherries, the varieties shown being Bedford Black and Waterloo. The Executors of Mr. W. R. Dixon secured the first prize for black cherries, and Mr. W. F. Wood a silver challenge cup for a basket of Napoleon, and also a first for a fine exhibit of Amber (Kent Bigarreau). The fruit of the last mentioned variety was especially good in shape and colour.

Messrs. G. H. Dean and Co., Limited, exhibited very fine cherries, gooseberries and black currants, for which they received some of the highest awards given. In white cherries they excelled particularly. For a red (sour) variety, Mr. E. B. Gascoyne surpassed the other exhibitors, and the Executors of Mr. W. R. Dixon took the honours for three distinct black cherries.

The gooseberries were enormous in size. A basket of Lancashire Lad won a first for Messrs. Wakeley Bros., and Mr. Sydney Wakeley was awarded a challenge cup for the yellow gooseberry Brighton Mammoth. In Class XIV, for any variety of red currant, Messrs. W. J. and F. O. Thomas received a challenge cup for Fay's Early Prolific, and excellent black currants were shown by Messrs. G. H. Dean and Co., Limited. Sir W. W. Berry was awarded the first prize for raspberries, his basket of Superlative



NEPETA PAUL CHANDON WITH LAVENDER BLUE FLOWERS.

to the eye. The sidalcea was well represented on all the stands where herbaceous flowers were staged, and it certainly strikes one as being a handsome plant for general decorative effect in the garden where a touch of warm colour is desired.

Phloxes were well to the fore, and the exhibit of Mr. H. J. Jones once again calls for special mention. He excels with the phlox, as he does with the hydrangea, and many of the varieties, which were laid out in baskets in the form of an oval carpet, were of wonderful shades. Among these we noted Rheinlander carrying large heads of salmon pink flowers with a deeper eye; Snowdrift and Mrs. Ruys, both pure white varieties; Mrs. H. Wood, delicate pink shading to deeper tones in the eye; and Nidar, of a mauve shade toning to white. Delphiniums were also staged, and provided that blue tone required to relieve the brighter shades of the phloxes. Two varieties, Millicent Blackmore and F. W. Smith, looked excellent in tall spray vases at each end of the exhibit.

Messrs. Waterers also showed a number of fine varieties of phlox, among which were Marie S. Jacob (pale lavender pink), Marechal

and red currants were in the capable hands of Messrs. Laxton Brothers, who were showing such strawberries as Omega and Rear-guard and their Laxton's Perfection currants. Many amateurs also contributed to the collection of fruits, along with the East Malling Research Station, which is doing such valuable work in the many fruit problems which beset the grower and cultivator in this country.

The alpinees were again rather overshadowed by the wealth of border plants, for their season is shorter in our gardens than in the mountains, where spring creeps up slowly from the valleys and has only just reached the snow line. But all rock plants are not alpine, and the variety in the few exhibits showed that the rock garden need never be without flowers.

Messrs. Tucker showed the oddly beautiful little *Campanula Zoysii*, with bottle-shaped flowers of lavender blue closely puckered at the lips. In its home in the Julian Alps it is purely saxatile, but in the garden it grows freely in scree mixture and is far less difficult than is generally supposed. Its worst enemies are the slugs, which have a strange and detestable predilection for the



being remarkably good in size, flavour and condition.

Among other exhibits were the following :

ALPINES.—Messrs. E. Dixon.

CARNATIONS AND PINKS.—Messrs. Allwood Bros., John R. Crowhurst, C. Englemann, J. Douglas and C. Herbert.

FRUIT.—C. H. Hooper, tables showing results of cherry pollination trials. Sir Charles Nall Cain, Bt., cherries and raspberries. Colonel B. T. Petre, new black currant.

HARDY PLANTS.—Messrs. T. Carlile, Chalk Hill Nurseries, K. and E. Hopkins, Kelway and Co., B. Ladham, M. Prichard, Rich and Co., Stark and Sons, Limited, and Mrs. Martineau.

LAVENDER IN TUBS.—Messrs. Lucas and Hill, Limited.

LILIES.—Lieutenant-Colonel Messel.

ORCHIDS.—Messrs. J. T. Bolton, Sanders and Co., and H. T. Pitt.

ROSES.—Messrs. Chaplin Bros., W. Easlea and Sons, T. P. Edwards and J. H. Pemberton.

STOVE PLANTS.—Messrs. L. R. Russell and Co.

SWEET PEAS.—Messrs. S. Bide and Sons, Limited, A. Blandford and Messrs. Dobbie.

VIOLAS.—Mr. W. Yandell.

## NEW AND RARE PLANTS.

### AWARDS OF MERIT.

*SALVIA DICHROA*.—This is a half-hardy species, by some authorities considered the same as *S. bicolor*. The stems are from 2-3ft. high and are square, characteristic of the family. The leaves are ovate in shape and rather long. Numerous flowers are borne in racemes 1ft. or more in length.

These are of a bright to pale blue in colour, with the middle lobe of the corolla white, providing a good contrast. It is rather a handsome plant, especially when given full play. Shown by the University Botanic Gardens, Cambridge.

*HOYA BELLA*.—A rather slender and bushy evergreen shrub 1-2ft. high, and of graceful and attractive habit. The leaves are rather thick and oval in shape. The more or less waxy-looking flowers are borne in umbels. The corolla is made up of five pure white lobes, while the crown consists of five violet, almost boat-shaped segments. As the flowers hang downwards and are hidden by the foliage, much of the beauty of this handsome little species is lost. Shown by Messrs. Russell, Limited, Richmond.

*PISTORINIA INTERMEDIA*.—This representative, probably more commonly known as *cotyledon*, of the *crassula* family is a small succulent herb with more or less of an erect habit, about 9ins. to 1ft. high. The leaves and also the stems are thick and fleshy. The numerous flowers are carried erect in terminal cymes. These are of a dull yellow in colour, with five spreading rather ornate petals. Down the centre of each petal runs a dark crimson dotted line quite characteristic. Shown by Mr. L. Johnston, Hidcote Manor, Campden, Gloucestershire.

*HEMEROCALLIS RADIANT*.—A tall handsome variety carrying large flowers of a pure shade of golden orange which does not shade away into lighter tones in the throat. The perianth segments were also of good substance with some character about them. Each flower is about 3ins. long and when fully open 2½ins. across. The stems are stiff and erect. Shown by Mr. G. Yeld, Gerrards Cross.

*NEPETA PAUL CHANDON*.—This is a decorative variety about 18ins. high, carrying numerous two-lipped lavender blue flowers borne on stiff and erect stems. The foliage is light green and provides a good background for the flowers. Shown by Mr. F. G. Wood, Ashted.

*ROSE DAINTY BESS*.—The praises of this fine single hybrid tea variety were fully sung in our report of the Rose Show at Regent's Park a fortnight ago. The large single flowers are composed of crinkled and waved petals of a fine shade of delicate pink which is deeper on the reverse side. Shown by Mr. W. E. B. Archer, Ashford.

## ORCHIDS.

*DIPLOMERIS HIRSUTA*.—A native of Sikkim, in the valley of the Teesta, where it is found on sandstone rocks at elevations of about 1,000ft. to 1,400ft. Leaf solitary, bearing stiff, scattered hairs on both surfaces. Flowers pure white, nearly 2ins. long and 1½ins. across. Award of merit. Shown by Messrs. Sanders, St. Albans.

*ODONTIODA THIASA* VAR. *GOLDEN GODDESS*.—A finely grown plant with over thirty-two flowers, the segments boldly marked with bright red. Cultural commendation. Shown by Mr. H. T. Pitt, Rosslyn, Stamford Hill.

*BRASSO-LÆLIO-CATTLEYA JUPITER* VAR. *MRS. STEWART*.—Not only is this a noble flower, but the present example was brought to a fine state by skilful cultivation. The two spikes each bore a couple of immense flowers of mauve colour, the labellum purplish. Cultural commendation. Shown by Mr. J. J. Bolton, Claygate.

# CORRESPONDENCE

## VIBURNUMS CARLESII AND BITCHIUENSE.

SIR,—I am grateful to my friend Mr. Grove for setting me right about the relative merits of these two species. It was not, however, from plants of *V. bitchiuense* at Monreith that I formed the opinion which I ventured to express in favour of *V. Carlesii*. We have not, and never have had, any of the former species here, though we have, and greatly value, plenty of the latter. I wrote after examining the plants of *V. bitchiuense* at Kew, which happened to be in flower at the time, and I could detect no tint of rose on the unopened buds. Evidently I must lose no time in acquiring this species.

May I add an apology to Mr. Stern for having taken up his challenge without adequate knowledge of the subject. I lower my lance in salute to him.—HERBERT MAXWELL, Monreith.

## A PRONOUNCING DICTIONARY.

SIR,—The *Gardeners' Chronicle* is quite right in making the "i" of "erica" long, and your correspondent Mr. C. G. O. Bond is in error in making it short and deriving the word from the Latin *ericius*, a hedgehog. Pliny's name "erica" is simply a transliteration of *ereike*, the Greek name for heath. The diphthong and the occurrence of the word in the Greek poets, e.g., in Æschylus and Theocritus, prove the quantity of the "i" beyond any doubt. The Latin *ericius* is of entirely different derivation.—G. H. ENGLEHEART.

## A CLIMBING ROSE.

SIR,—I think the rose described in THE GARDEN of July 4th by M. L., Bournemouth, is one I grow which came from Baveno (Lago Maggiore), where the gardens are full of it. I do not know the name, have never seen it elsewhere in England, and have not observed that it has any lemon verbena-like perfume.

If M. L. gives me her address I will send her a specimen when it comes into bloom. It grows easily in Sussex. I have given it the protection of a wall and intend to try it more in the open when I have other plants. The two I have now are cuttings I struck from the original plant from Baveno.—DALLING.

## ALUMINIUM SULPHATE AGAINST SLUGS.

SIR,—In discussing the use of sulphate of aluminium against slugs, some experiments reported in the *Journal of the Royal Horticultural Society* are referred to as the Wisley experiments. May I point out that these experiments were not made at Wisley, but were the work of the author of the paper, Mr. W. E. H. Hodson.—FRED. J. CHITTENDEN, Director, R.H.S. Gardens, Wisley.

## A REMEDY FOR EARWIGS.

SIR,—Your correspondent, L. P., may clear his plants of earwigs by using a one in three thousand strength solution of perchloride of mercury, either as a spray or distributed through a watering can. It is made by dissolving 120 grains of mercury perchloride and the same weight of ammonium chloride in 5 gallons of water. Care needs to be exercised in the use of mercury perchloride, for the salt is very poisonous. But, while it is deadly to both earwigs and slugs, it is harmless to plants, used in the strength given.—WM. TAYLOR.

## TRENCHING OF CLAY SOIL.

SIR,—I did not at first intend to add to my recent correspondence on the above subject, but after reading the note in your issue of the 23rd ult. I would like to say that, after Mr. Beckett's qualifications and elaborations, he and I are not so far divided in opinion as his original article would suggest.

If trenching can be done after the winter rains are over, and plenty of opening and

enriching material can be added before a crop is planted or sown, I by all means second Mr. Beckett's "Trench, trench, trench."

But how many places at present permit of such work in spring—say March or April? Why, it takes most gardeners every minute to get ground decently wrought a single spit, along with the hundred and one other jobs which fall to be done at that season.

Most trenching and double digging is done in October and November, before the rains begin, as that is the only season the average gardener can find time for it.

Also, the necessary material for improving the sterile soil brought to the surface has a limit in most places, at least in my experience; hence my reason for advising caution.

Perhaps you will allow me to say that I am greatly surprised that so little interest seems to be taken in this, one of the most important of garden operations. I expected that many gardeners would have given their experience on one side or the other.—J. H.

## CRINODENDRON HOOKERI.

SIR,—Taking the above name as given at Chelsea, I would like to mention some of the names which have been given to it by botanists and others. Besides the above spelling, it has also been rendered as *C. Hookerianum*. Only two species seem to be known, belonging to the lime tree family (*Tiliaceæ*), namely, *Tricuspidaria lanceolata* and *T. dependens*. The former is the name adopted as the oldest or correct one for the plant under notice at Kew. *Tricuspidaria* refers to three small points of the flower. But these points are conspicuous only in *T. dependens*, which would seem to have been the first species described; and a pale-flowered inconspicuous one it is by comparison with its more august relative. I have known *T. dependens* to be taken for the better plant in a garden, until it flowered and annoyed its owner.—J. F.



# THE SALTIRE SHOW

**T**HE nineteenth annual show of the Saltire, Shipley and District Rose Society was held on July 14th and 15th. at Roberts Park, Saltire, in delightful weather, and it attracted a large attendance. Three large marquees were filled with choice exhibits, among which roses, sweet peas, carnations, pansies and violas, and rock gardens, predominated. The marquees were spacious and remarkably cool, considering the summer-like conditions, and everything bore a neat appearance. The public were able to see all the exhibits in perfect comfort.

One marquee was almost exclusively devoted to the rock exhibits. Messrs. Mackenzie and Sons of Ilkley were awarded two large gold medals for a charming rock garden which contained a varied display of alpine and shrubs and which was entered through a rustic arch. In the centre there was a streamlet crossed by a miniature rustic bridge.

Messrs. Conway's of Halifax had a rock garden flanked by a neat formal garden, surrounded by a border of pink verbenas and central beds containing polyantha roses, marguerites and hydrangeas.

Other good rock exhibits were those of Messrs. Kershaw's of Keighley (in which we noticed a fine crazy path), Messrs. Rashley and Co. of Mytholmroyd, and Mr. Gardner. In the latter exhibit there was a miniature tennis court and a floral surround.

In another marquee Mr. Frederick G. Wood, Mr. R. V. Roger and Messrs. Maxwell and Beale all had interesting collections of alpine set out on tables; but the feature of this tent was a pretty Old English formal garden, constructed by Messrs. Backhouse's Nurseries, Limited, York. It was semicircular in form, with a curving, low wall, below which in the centre was a miniature statue of the god Pan. This original and neat exhibit deservedly won the President's large gold medal.

## ROSES.

There were many fine trade exhibits, and the principal prize-winners were Messrs. Alex. Dickson and Sons, The Donard Nursery Company, Messrs. Bees, Limited, Mr. Elisha Hicks, Mr. Henry Drew and Mr. George Burch.

In Messrs. Dickson's stands we noticed the following varieties as being particularly good: Scarlet Glory, Shot Silk (exceptionally fine), Betty Uprichard, Lady Inchiquin, Dame Edith Helen, Richard E. West and Fred. J. Harrison.

The Donard Nursery Company had fine specimens of Margaret Dickson Hamill, Clara Curtis, J. G. Glassford and Marjorie Bulkeley.

Messrs. Bees, Limited, showed Ophelia, Golden Emblem, Mme. Herriot, Mrs. Henry Morse, Nellie Parker, The Queen Alexandra Rose, and Independence Day.

Mr. Hicks had some very fine blooms, and his best varieties were W. F. Dreer, Los Angeles, Lady Inchiquin, Golden Emblem, Clovelly, Johanna Bridge, Betty Uprichard, Argyle and Florence H. Veitch.

In the amateur classes Mr. Cuthbert Dixon of Sheffield was a prominent winner, and among the local amateurs Mr. Harold Mitchell of Bradford was awarded first prize in all the principal classes. Mr. W. A. Simpson-Hinchliffe won the prize for the premier bloom in the Show with a very fine specimen of Mrs. Foley Hobbs.

In Mr. Mitchell's stands, Mrs. Foley Hobbs, Mrs. Henry Bowles, Edel and Caroline Testout were specially good; and in the other amateur exhibits, Willowmere, Lady Inchiquin, Mrs. C. Lamplough, Gladys Holland, Mrs. Henry Morse, Lady Ashtown and J. L. Mock were notable varieties.

Mr. G. C. Waud, in addition to a fine display of roses, also had some very fine carnations and sweet peas.

## OTHER FEATURES.

It was said that there has never been a finer display of perpetual carnations seen in the district than the magnificent exhibit put up by Mr. Engelmann. It is doubtful if Mr. Engelmann has ever had his scarlets in finer colouring, and some of the varieties were positively dazzling. Tarzan, Laddie, Red Laddie, Saffron, Dainty and Spectrum were all outstanding kinds.

There were many fine vases of sweet peas in the competitive classes, and Sir Randolph Baker (gardener, Mr. A. E. Usher) secured the chief prizes. Some of his best vases were those of Picture, Tangerine, W. J. Unwin, Wembley, Austin Frederick and Powerscourt. In the local amateur classes, besides Mr. G. C. Waud, the exhibits of Mr. Stephen Shackleton were very good.

Pansies and violas, in spite of the drought, were well shown. Mr. A. W. Upton won first prize for a display of violas, in which the following varieties were especially good: Admiral Jellicoe, Mrs. Andrew Stevenson, Mrs. J. Ritchie, William Hattersley, Milton Jumbo and Annie Hamilton. Mr. J. Wood was awarded first prize for a neat table decoration of violas.

The pansies and violas staged by Mr. Herbert Bairstow were of high quality and secured for him all the premier prizes.

His stand of twenty-four violas included Admiral Jellicoe, Mrs. W. Hunter, Jenny Simpson, James Blair, Nancy Harrison, Annie Hamilton, Peggie Ramsey, William Barr, Edith Bastock and Mrs. J. McEwan. His twenty-four fancy pansies included Mrs. Andrew Frater (specially good), Argyle, Alex. Lister, Miss Nellie Thomson, A. J. Balfour and John Whiteford.

In the classes for six blooms (one variety only), Mr. Bairstow won first prizes with Betty Bishop, Malcolm Milner, Admiral Jellicoe and Annie Hamilton.

# SWEET PEAS AT WESTMINSTER

**U**NDER the auspices of the National Sweet Pea Society, the annual exhibition of sweet peas was held at the R.H.S. Hall on Thursday and Friday last, July 16th and 17th. It is now twenty-five years since the inception of this Society and year by year a steady improvement has been recorded, till on this last occasion all previous shows were overshadowed. A high water mark of excellence was reached, which will be hard to surpass, if not to equal. It was probably the finest show of sweet peas which has ever been seen at Vincent Square and great credit is due to the Committee, especially the Secretary, Mr. A. C. Bartlett, whose untiring energy and enthusiasm has made this possible. Almost all the trade growers were represented, while in the amateurs, classes, the entries were numerous and the competition very keen.

## TRADE CLASSES.

Among the trade growers, interest centred round the classes for the Bath and Eastbourne Cups, and the high standard and general excellence of the exhibits was most marked. In the Bath Cup Class, almost all our leading sweet pea firms were represented, and it fell to Messrs. Robert Bolton and Son of Halstead to carry off the Cup, along with a large gold medal. Their stand, although it appeared rather crowded, had a really fine display of colour, the shades of the blooms being greatly enhanced by the decorative trimmings of asparagus. It seems invidious to single out names, but those varieties which attracted our attention were Charming, Mrs. Tom Jones, Wizard, Supreme and Peggy, a novelty for 1926. The blooms were all in excellent condition considering that

they were all grown out of doors without any protection or shading from the spring sunshine.

A large gold medal was awarded to Messrs. Sutton and Sons, Reading, who had a well arranged stand, in which three overhanging baskets, containing Dignity, Sunset and Hebe were conspicuous. The background consisted of four spray vases filled with Sutton's Giant White, Field Marshal (deep crimson), and the scarlet Pimpernel. Again the colour was rich and pure and the quality of the individual flowers excellent.

Mr. J. Stevenson of Wimborne staged a well balanced exhibit, in which the notable varieties La France, Cynthia, Diana and Hebe were employed to form a light toned background to the brighter and deeper shades of such sorts as Charming, Venus and Coraline. The high standard reflected great credit on the raiser in his cultivation, which was acknowledged by the award of a silver-gilt medal.

Messrs. Dobbie and Co. of Edinburgh, whose name is famous all the world over in connection with sweet peas, staged a most attractive display, consisting of a number of varieties, such as Grenadier, Sunset, Hawlmark Pink, all in the first quality of excellence. The shades of colour were good, while the size and quality of the blossoms were beyond reproach. The reputation which this Scottish firm has already established for themselves in connection with sweet peas should be greatly added to by this display, which received a large gold medal.

Another well set up exhibit was that arranged by Messrs. E. W. King and Co., Coggeshall, which was awarded a large gold medal. Such varieties as Pimpernel,

with baskets of Patriot, Britannia, 2 L O and Seedling were included in the stand and all looked exceedingly handsome.

A gold medal was awarded to Messrs. Ireland and Hitchcock for their stand, which was composed of such sorts as Mauve Prince, Royal Scot, Lord Lascelles and Mascott's Ingman. All the varieties were in really fine condition considering the warm, dry weather.

Mr. A. Blandford, West Horsley, made use of the overhanging baskets, in which were arranged Valentine and Daisybud, both of almost a similar shade of blush pink. Other sorts included Austin Frederick Improved, Wild Rose and La France, the latter two showing up well against the darker tones of Warrior. A silver medal was awarded this exhibit.

In Messrs. Daniel's tastefully arranged stand such varieties as Picture, George Shawyer, Rosy Morn, Jack Cornwall V.C., were outstanding. The blooms were of good size and colour and fully deserved the silver medal awarded to their exhibitors.

In competition for the Eastbourne Cup, Messrs. R. Bolton and Sons again added to their already long list of successes by winning the Cup and a large gold medal with a most attractive and meritorious exhibit, which showed the merits of the individual varieties off to distinct advantage. The colour scheme was also to be commended. The spray vases of Royal Pink, Grenadier and Wizard used to overshadow the other varieties, were excellent, and their deeper tints were to some extent relieved by the clean, light shades of Ivory Picture and Matchless. Other sorts which were well shown were Gold Crest, Tangerine Improved, Blue Bird, Picture and Peggy.



Messrs. Sutton once more employed overhanging baskets filled with Lucifer, Picture and The President Harding, in their exhibit in this class, which received a large gold medal. Huge spray vases of Mrs. T. Jones (of a good colour), Mammoth, Royal Scot and Powerscourt were also to the fore as a background to such sorts as George Shawyer, Hawlmark Pink and Celeste.

Gold medals were awarded to Messrs. Dobbie and to Messrs. Ireland and Hitchcock for their excellent displays, the former firm including really fine blooms of Miss California, Mrs. T. Jones, Picture, Ruby, Elegance and Charity, relieved to some measure by well placed vases of Constance Hinton: while the latter staged large vases of Matchless, Powerscourt and Wizard, along with many other well grown blooms.

Messrs. Carter and Co. of Raynes Park, although they did not receive an award, had a tastefully arranged exhibit in small baskets, such varieties as Royal Scot, Diana, La France, R. F. Felton and Hebe being represented.

#### AMATEURS' CLASSES.

Although the trade was well represented at the Show, yet the principal feature was the large number of amateurs who entered for the different classes, and such is to be highly commended. The Society exists principally for the amateur, to assist him in the raising and growing of sweet peas, and it is most gratifying to see the results of their efforts in the increasing number of amateurs who are coming forward every year to take a place in the competitive classes. Prizes cannot be given to all, and those who have gone away empty-handed must do better in the future. In the various classes the entries were numerous and the exhibits were of a high standard, leading to a very keen competition. The majority of the blooms shown were of good quality and colour and indicated that the amateurs were almost as highly skilled in the growing of the certain varieties as the raisers themselves.

The *Daily Mail* Challenge Cup went to Mr. T. W. Franks, Tonbridge (gardener, W. Humphrey), who, in his twelve vases of distinct varieties included Tom Sykes, Pimpernel, Rosy Morn, Wizard and Powerscourt, all in fine condition. In addition to the Cup, he was also made the recipient of £20 by Messrs. E. W. King, as he included three of their novelties in his exhibit. Major General R. L. Mullons, Colchester (gardener, T. Baines), was a close second, with such sorts as Wild Rose, Royal Sovereign and Tom Sykes, among others, while the third prize fell to Dr. G. Cole, Beeston, Notts, who staged Lord Lascelles, Matchless, Gloriosa and others.

The Sultan Cup was awarded to Lieutenant-Colonel Sir R. Baker (gardener, Mr. Usher), who showed, in his eighteen vases of distinct varieties, such sorts as Charming, Valentine, Royal Scot and Royal Sovereign, the quality of the blooms being excellent. Major Geoffrey Lubbock, Pangbourne, Berks. (gardener, J. B. Lowe), was second, with fine blooms, among which were Hawlmark Pink, Field Marshal, Jean Ireland and Mrs. Arnold Hitchcock.

In the class for six vases of distinct varieties, Mrs. V. M. Williamson, Canterbury (gardener, W. Langsdon), received the Cory Cup, the premier award for her excellent exhibit, which included fine blooms of Hebe, Charming, Royal Sovereign and Powerscourt. Mrs. Shirley Woolmer followed a close second, including Mrs. Tom Jones, which was judged as the best bunch in the Show, while Mr. W. Barrett, Bray, Co. Wicklow, was third with really good blooms of Elegance, Gladys and Annie Ireland, considering that they had been cut on the Tuesday and had with stood a fourteen hours journey.

Lieutenant-Colonel Sir R. Baker was successful in winning the gold medal of the Society for his collection of twelve vases of British raised varieties, while Lieutenant-Colonel H. Laurence Scott was a good second, with Mrs. Tom Jones, La France and Hebe among others.

Mrs. Williamson added to her triumphs by winning first prize in the class for three distinct colour varieties. Her winning three were Constance Hinton, Mrs. C. W. J. Unwin and Mascott's Helio. Mr. Arthur Hutton was second, while Mr. Allan Gibbs obtained the third prize.

The Monro Challenge Trophy, for the best twelve vases with not less than six varieties, raised or introduced by the exhibitor, went to Messrs. Thos. Cullen and Sons, Witham, who staged, among others, Pink Perfection, Blue Bird, Mermaid and Crusader, while Messrs. E. W. King, with 2 L O, Britannia and others, were second, and Mr. H. J. Damorum was third.

In the President's Class with three vases illustrating colour schemes, the first prize

Still another cup, the Burpee Cup, was awarded to Sir R. Baker, when he was first with six varieties which have not been in commerce for more than one year. He included Miss California, Mammoth, Sunshine and Coraline. Mr. H. D. Tigwell was a worthy second.

In the District Classes, Mr. Allan Gibbs was a successful first for the Western Counties and South Wales, while Mr. T. W. Franks occupied a similar position in the Southern Class. Entries were poor in the Scottish and Irish Classes, and Mr. J. W. Jeffrey of Selkirk was first in the former and Mr. W. Barrett in the latter. The reverse was the case with the Midland Counties, where the entries were large, Captain R. B. Brassey being successful.

Few affiliated societies put up an exhibit for the challenge shield awarded for twelve distinct varieties, and this was won by the Pangbourne and District Gardeners' Association by a well set-up exhibit.

In the single bunch classes there were numerous entries and many varieties were



MESSRS R. BOLTON'S EXHIBIT WHICH WAS AWARDED THE EASTBOURNE CUP.

was awarded to Miss Russell, whose vases were most attractive. Mrs. F. W. Franks was second, and Mr. A. Johnson, third.

Messrs. E. W. King reversed the order of the things in the seedling class, when they were first with Britannia, Giant Mauve and Brenda, three varieties not yet in commerce, and Messrs. Thos. Cullen, were second.

The former firm were also successful in the class of one vase of a variety not yet in commerce. With 2LO they were first, with Messrs. Ireland and Hitchcock runners-up with Firefly.

In the raisers' classes, Mr. J. Stevenson was first with Charming, Coraline, Venus and Cynthia, with Messrs. Thos. Cullen second and Messrs. E. W. King third.

In the class for the E. W. King Cup, for which there were a large entry, Mrs. Arthur Hutton was a praiseworthy winner with blooms of Grenadier, Royal Sovereign and Geo. Shawyer. Sir Joseph Tichborne was second, with Captain R. B. Brassey and Miss Russell third and fourth respectively.

shown. Miss Russell was the most successful in these classes, lifting eight first prizes.

In the special division for amateurs, Mr. F. T. Rogers won the Hawlmark Challenge Cup, while Mr. Arthur Leigh won a silver cup. Mr. Simon Richards was awarded *The Amateur Gardening Challenge Cup*, with such noteworthy varieties as Charming, Mascott's Purple and Mrs. A. Hitchcock. In the classes for small growers, Mr. H. W. Lewington received the cup for twelve distinct sorts, while the Walter Voss Challenge Cup went to Mr. J. Randall.

In the floral decoration classes, the standard might have been higher. Foliage was too much in evidence, while in many cases too much attention was given to the actual vases, rather than to the flowers themselves. The baskets, however, were tastefully arranged and the first prize went to Mrs. L. Fortescue.

There were a few other classes of which, unfortunately, through lack of space, we are unable to give an account.



## FLOWERS AT THE ROYAL SHOW

FROM a small beginning the horticultural section of the Royal Show has now become an important event. In consequence of the liberal prizes offered, the herbaceous section display excels anything ever seen in London, and with premiums amounting to £75, offered in three prizes, no other show, probably (and certainly not the premier horticultural society), can bring out such fine groups.

In the group of Messrs. Bees, which secured the highest award, delphiniums predominated. Cambria is a metallic blue, and Willie O'Brien a pale shade of blue. The yellow *Verbascum vernale* was very telling. In the group of Messrs. Artindale (Sheffield) that fine *Eremurus Bungei* was a good shade of yellow.

Iceland poppies, and especially Giant Orange, were bright in Messrs. Gibson's (Leeming Bar) fine display and the ever popular *erigerons*, which are sometimes called "Summer Michaelmas Daisies," were fine in Messrs. Harkness' group, also from Leeming Bar.

One of the most beautiful of herbaceous plants, the lovely blue *Scabiosa caucasica*, and its varieties, figured prominently in the exhibit from Messrs. Jarman and Co. (Chard).

Roses which are best for the garden are not always to be seen at a show, but a judicious selection of not always the largest and best formed could be made from *Souv. de Georges Pernet*, rose pink flushed with apricot red; *Souv. de Claudius Pernet*, bright yellow; Betty Uprichard, old rose with darker reverse to petals; Lady Inchiquin, a unique shade of orange vermillion; Los Angeles, salmon flushed with apricot orange; *Etoile d'Holland*, crimson, sweetly perfumed; and Clarice Goodacre, a dainty biscuit white. These were displayed by Messrs. Bees, Limited, Liverpool; Thos. Robinson, Nottingham; W. and J. Brown, Peterborough; A. J. and C. Allen, Norwich.

Shot Silk, a pink flushed with a scarcely perceptible shade of yellow, was the best

in Messrs. Alex. Dickson's group. The combination of a fine garden rose with the form of exhibition standard is found in Lord Charlemont, a deep crimson, shown in Messrs. B. R. Cant's group.

**CARNATIONS.**—No show at any time of the year is now without carnations, and just at this date the old border types are at their best. Border Yellow, Bookham Rose and Salmon Clove, were three of the best seen in Mr. Horace Lakeman's collection from Thornton Heath. A miniature garden on the ground contained Messrs. Allwood Bros. *Dianthus Allwoodii* from Haywards Heath; they also had Edward Allwood massed in a telling way, included in their collection of perpetuals. The crimson carnation, Topsy, was fine in Mr. C. Engelmann's display from Saffron Walden.

**FORMAL GARDENS.**—Much anent the arrangement of a garden may be learnt by a visit to one of these shows. Thus, an ideal crazy paving surrounding a cool pool was arranged by Mr. C. H. Taudevin of Wollaston, Cheshire, and a still more extensive lay-out by Messrs. Kent and Brydon from Darlington included a terrace walk with large water garden flanked with bamboos, lilies, delphiniums and other herbaceous plants.

Smaller rock gardens were arranged by Messrs. Maxwell and Beale, and Mr. R. V. Rogers. An instructive garden was made by the Aldersley College near Chester. Those who are fond of a dainty flower in this class will find the miniature mauve *Campanula linifolia*, which was in the exhibit of Messrs. Bowell and Skarratt, a charming addition.

**GROUPS OF PLANTS.**—The masterly skill of arrangement employed by Messrs. Cypher, W. Holmes and T. Petch, were alone worth a visit to the show to see. The combination of orchids and foliage plants was made to give the maximum light effect and show combined.

Sweet peas with perfume are mostly found among mauve and duller shades, but the orange salmon Gold Crest in Mr. Robert

Bolton's group, the reddish salmon Royal Sovereign in Mr. E. W. King's group, and the soft mauve Powerscourt in Mr. J. Stevens exhibit were outstanding. The mauvy blue variety "Orchid" was conspicuous in Messrs. Dobbie's group.

Some gorgeous begonias came from Messrs. Blackmore and Langdon. A good selection would be Nurse Cavell, a pure white; Mrs. Richard Caulfield, rich salmony rose; Mabel Langdon, pale salmon; Sir Henry Wilson, scarlet; Rayon d'Or, orange.

Strawberry Waterloo, nearly purple, with Omega, a new late variety, were included in the group from Messrs. Laxton Bros.

**MISCELLANEOUS EXHIBITS.**—Messrs. Suttons had a tent all to themselves, with patches of various types of grasses for golf courses. Inside the main tent sweet peas, larkspurs and *Clerodendron fallax* were well displayed.

The fragrant *Phlox Etna*, a reddish salmon, pentstemons, and the brilliant dwarf *Dahlia Coltness Gem*, were sent from Hawick by Mr. John Forbes. From The Donard Nursery, Newcastle (Ireland), some choice shrubs included the brilliant *Tricuspidaria lanceolata*, and a much neglected, but easily grown, shrub, *Spartium junceum*, popularly known as Spanish broom.

A further tent, away from the rest, housed the specialities of Messrs. Dicksons, Chester. Roses and herbaceous plants, fruit trees and floral work were a varied display from a firm noted for the great variety of its products.

A fine strain of *streptocarpus* and *gloxinias*, arranged with *caladiums*, *crotons*, came from Messrs. John Peed and Sons.

A collection of the more rare herbaceous plants, as well as such showy subjects as *kniphofias*, *phlox*, *campanulas*, etc., were sent from Christchurch by Messrs. Maurice Pritchard and Sons.

One naturally associates sweet peas with the name of Henry Eckford, Wem. His flowers were of their usual fine standard and included some fragrant varieties, which the public appreciates more to-day than ever.

## THE WINDSOR ROSE EXHIBITION

ON July 11th the Windsor Rose Society held its Annual Show on the slopes of Windsor Castle, so thoughtfully and considerably thrown open by His Majesty. In past years the Show was usually held on the last Saturday in June, but for good and sufficient reasons the Committee decided upon a later date this year, and gained thereby in that they had the finest Show for many years, and the perfection of the arrangements represented an enormous amount of hard work by the hon. secretary, Mr. J. Harding.

The chief attraction is the King's Cup, which is offered annually for the best forty-eight distinct roses and is open to all England. In the past it has been won four times each by Messrs. B. R. Cant and Sons and by Messrs. D. Prior and Son, and twice by Messrs. Alex. Dickson and Sons. This year's winner proved to be Messrs. Frank Cant and Co., who staged an excellent collection of such sorts as Mrs. Wallace H. Rowe, Mrs. Foley Hobbs, Mrs. Elisha Hicks, Dean Hole, Bessie Brown and Premier. Messrs. B. R. Cant and Sons were a good second in the champion class, and they had fine blooms of Mrs. Henry Bowles, Mrs. G. Marriott, Bessie Chaplin and George Dickson; while Messrs. D. Prior and Son were third.

Mr. George Prince was the most successful exhibitor of eighteen tea or noisette blooms, and his very fine collection included fragrant specimens of W. R. Smith, Maman Cochet,

White Maman Cochet, Mrs. Foley Hobbs, Lady Plymouth and Mrs. Hubert Taylor. In the second prize exhibit of Mr. E. J. Hicks Maman Cochet, W. R. Smith and Mrs. Foley Hobbs were particularly good.

Competition was very strong in the class for trios of twelve varieties, and Messrs. B. R. Cant and Sons had a splendid exhibit of such sorts as Captain Kilbee Stuart, H. V. Machin, George Dickson and Mrs. George Norwood. Messrs. D. Prior and Son were second, and they included Venus, Mrs. R. D. McClure, Martha Drew and Mrs. G. Marriott of great excellence.

The best twelve blooms of any hybrid perpetual or hybrid tea rose were magnificent blooms of Mrs. Elisha Hicks staged by Messrs. F. Cant and Co.; while Mr. C. Gregory was second with a splendid dozen of *Candeur Lyonnaise*. The similar exhibits of any tea or noisette rose were also of high quality, and Mr. George Prince was the first prize winner, with Mr. E. J. Hicks second and Messrs. D. Prior and Son third, all with Mrs. Foley Hobbs. Mr. George Prince was also the most successful exhibitor of twelve blooms each of a crimson and a white rose in two baskets.

The best of the four exhibits of twelve bunches of decorative roses was set up by Mr. Henry Street, who had lovely vases of Lulu, Sunstar, Ophelia and Golden Emblem. Messrs. A. Warner and Son were second with Los Angeles, Isobel, Ophelia and similar varieties.

### AMATEURS' CLASSES.

Equal in importance with the King's Cup to the trade is the Windsor Challenge Cup to amateur rosarians. It is for open competition, and this year the greatly desired distinction of winning the honour fell to Dr. R. C. Turnbull, Colchester, who had among his superb twenty-four blooms the best rose in the whole of the Show. This was a delightful specimen of Mrs. C. Lamplough. He also showed George Dickson, Mrs. H. R. Darlington, Cleveland, Mrs. George Marriott and F. N. Thompson of great merit. Mr. F. H. Fieldgate, also of Colchester, was a worthy second in this important class, and his board of fine varieties included Louise Crette, Her Majesty, Avoca and Coronation. Dr. Turnbull also won the first prize for trios of six varieties with a superb collection, and Mr. Fieldgate was again a good second. Dr. Turnbull added to his triumphs by showing the finest six tea roses, and he included lovely blooms of Mrs. Campbell Hall, Maman Cochet and White Maman Cochet; while Mrs. Henry Balfour was second.

In the local classes, Mr. J. Tiller had the best collection of roses, and he included Lady Inchiquin, Mrs. G. Marriott and George Dickson of great excellence.

The splendid quality of the many exhibits of sweet peas augured well for the success of the forthcoming annual show of the National Sweet Pea Society. The Prince of Wales' Cup was again won by Sir Randall



Baker, Blandford, with fifteen magnificent vases of Wizard, Wild Rose, Powerscourt, Warrior, Constance Hinton and Mrs. Arnold Hitchcock. Major C. B. Krabbe, Calcot, Grange, Reading, was a good second in this large class, and he showed beautiful vases of Bunty, Wizard, Hebe and Purple Perfection. Sir R. Baker also showed the best twelve bunches in the open amateurs' classes, and with six equally fine vases won the Edward Webb and Sons' prize for sweet peas.

The trade exhibits were a magnificent feature of the Show, and Mr. Elisha J. Hicks again won the Lady Peter Cup with a splendid exhibit of roses. Messrs. A. Bide and Sons had sweet peas; Mr. Charles Turner and Mr. J. C. Allgrove showed delightful groups of border flowers; Mr. J. H. Pemberton, Messrs. Brinkman Brothers, Mr. G. Gregory and Mr. C. H. Murrell staged roses; while Mr. W. Candell set up one of the largest collections of lovely violas ever seen.

## BORDER CARNATIONS

THE two shows held by the National Carnation and Picotee Society during the last week were most successful owing to the untiring energy of the committee. On July 14th some fine blooms were exhibited at the Royal Horticultural Society's Hall; and on July 16th an interesting show was held in the Carpenters' Hall. The latter is the first show which this Society has held in the City during the forty-seven years of its existence. After a few words spoken by the President, the show was opened by the Lady Mayoress, who very kindly presented the challenge cups won at the previous show. The representative of Mr. James Douglas of Bookham fame received the Cartwright Challenge Cup; Miss Shiffner of Lewes the Edmund Charrington Challenge Cup; and Mr. H. A. Knapton of Orpington the Martin Smith Memorial Cup.

The quality of the blooms exhibited was excellent, the colours clear and bright and the foliage healthy. The selfs were not so good as many of the fancies, which were truly of outstanding merit. Among the amateurs who carried off the greatest number of prizes were Miss Shiffner, Mr. E. Charrington of Limpsfield, Mr. James Fairlie of Acton, Mr. H. A. Knapton, Mr. F. W. Seymour of Finchley and Mr. S. Williams of Chipstead.

In the first division (open), Messrs. Lowe and Gibson deserve special mention: they were awarded a first in every class. Ganymede was the best white ground picotee, Togo the best yellow ground picotee, and Steerforth the premier clove-scented carnation. Fine specimens of Lieut. Shackleton, Prospero and May Murray were shown by this firm. Messrs. Torrance and Hopkins also had some good carnations in this division, including David Herbert and Paladin. In the amateur classes, Mr. F. H. Seymour had a first prize exhibit, and of the three fancies Paladin was superior in shape and quality. Mr. E. Charrington showed St. Claire Amos, and, near by, Mr. F. H. Seymour had some beautiful blooms of that charming orange yellow variety, Elizabeth Shiffner, and the fragrant Burgundy clove. Miss Shiffner, one of the most successful exhibitors of the Society for some years, took a first prize for the pale cerise pink, Mrs. R. P. Smith.

In the third division, in which only members who grow fewer than 300 plants in pots were allowed to exhibit, Mr. R. S. Bowra of Golders Green won two first prizes, Bookham Rose, Border Yellow and Highland Mary being the best varieties which he

exhibited. In Class 21, Mr. H. A. Knapton showed Santa Claus, a yellow ground picotee with a narrow edging of purple. A vase of three dissimilar self varieties and another of three blooms of clove-scented varieties won prizes for Mr. S. Williams. Mr. H. A. Knapton was particularly successful in this third division.

Blooms from plants grown and flowered in the open border were exhibited in the fourth division. Primrose Dame and Yvonne Thomas, Lieut. Shackleton and Highland Mary, shown by Mr. F. W. Seymour, were awarded first prizes. Mr. H. Spicer of Hitchin had some lovely flowers of Steerforth, and Mr. G. D. Murray of Worcester Park won a first prize for a seedling carnation.

The three trade exhibits were staged by Messrs. Allwood Brothers, Mr. James Douglas and Messrs. Lowe and Gibson. Many of the old varieties were seen on these stands. Mr. James Douglas had a large collection of new and old varieties, including Kelso, Lieut. Shackleton, M. F. W. Seymour and Elbor. The last two varieties gained first-class certificates on July 14th. Messrs. Lowe and Gibson had many good fancies and some excellent novelties which should soon become very popular and were well worth taking note of. Most noticeable of the varieties from among the whole exhibit were Viceroy, Mr. Edmund Charrington, Myrtle Pettigrew, Joan Lowe and Dr. Raymond Crawford.

## OBITUARY

MR. E. CHARLES BUXTON.

IT is with the deepest regret that we have to announce the death of Mr. E. Charles Buxton of Coed Derw, Bettws-y-Coed. Though he had attained the ripe age of eighty-seven, he was still working in his beautiful garden when he was struck by the intense heat, passing peacefully away a few days later, *i.e.*, on the 11th inst. Though he was not a prominent public figure in horticultural activities, Mr. Buxton was widely known, large numbers of people at one time or another having visited his wonderful garden. He was, moreover, such a voluminous letter writer and frequent contributor to the garden press on matters pertaining to most phases of horticulture, that few men of his generation could claim to have enjoyed a more varied and extensive circle of friendship.

To the average gardener of to-day and to generations to come, the memory of "E. C. B." will be kept alive by the lovely clear blue form of *Geranium Wallichianum*, by *Thymus serpyllum aureum*, the lemon yellow *Anthemis tinctoria*, the very dwarf *Aster dumosus* and a distinct form of *Lychnis viscaria*. But to these and other excellent plants which bear his name one might add many which, if they did not originate in the Coed Derw gardens, have been treasured and saved from oblivion by their devoted owner. Among the former is that delightful little unnamed white geranium (not the albino Herb-Robert), *Dianthus Woolley Dod*, *Veronica peduncularis* and *Rhododendron cheiranthifolia*. The beautiful pure white *Lamium Orvala alba* was one of Mr. Buxton's latest introductions, and there is no doubt that the fine form of *Cotoneaster horizontalis*, with perfectly flat, prostrate branches and practically identical with that now listed as *C. h. var perpusilla*, appeared as a seedling at Coed Derw before the latter variety was sent in from Tibet. Another plant of the highest merit which first saw the light at Bettws-y-Coed is a particularly good form of *Sedum spathulifolium*, with blood crimson leaves.

If the passing of Mr. E. Charles Buxton means that the gardening world is the poorer

for the loss of one of that distinguished band of worthies which have linked the days of fifty and more years ago with our own, one also craves the honour of paying a tribute to the memory of one who was, above all else, a grand old English gentleman of a type that is fast vanishing from among us.

**Temporary Trial Ground.**—The N. of E. Horticultural Society has been granted the use of a plot of land, one and a half acres in extent, situated on the Harlow Moor, at Harrogate, by the municipal authorities, at a rental of £2 per annum. It is intended to use the land as a temporary rose trial ground. Adjacent to the pine woods and a little west of the reservoir, this land is peculiarly adapted for rose culture. The Hon. Secretary of the North of England Horticultural Society, who has done yeoman work on behalf of the Society in the north, is to be heartily congratulated on the fruition of this scheme, which has been under consideration for many months.

**Rose Trials at Wisley.**—The first meeting this season of the Judging Committee appointed by the R.H.S. to review and adjudicate upon the roses under test at Wisley, took place on Saturday June 27th, when thirty varieties, then in full bloom, were examined and pointed. The Committee's awards are based upon points given for hardiness, habit, foliage, freedom of blooming and its duration, colour, shape, fragrance and lasting properties. The first-class awards given last year by the Committee to Hawlmark Crimson, Betty Uprichard, Christine, Red Letter Day and Mrs. Wemyss Quin, were in all cases again confirmed by their inspection on this visit. Further meetings of the Committee have been arranged during the blooming season. The rose garden is situated about a mile from the main entrance to Wisley Gardens, and it is well worth a visit by all lovers of the rose, and, indeed, by everyone who has a genuine interest in a garden.

**Trials at Wisley.**—The Royal Horticultural Society will carry out trials of nerines and lachenalias in their gardens at Wisley during the coming winter. Raisers and growers are invited to send three bulbs of each of their varieties to The Director, R.H.S. Gardens, Wisley, Ripley, Surrey, so as to reach him by Friday, July 31st. He will be pleased to send the necessary entry forms on request. A trial of winter spinach will take place at Wisley during the coming winter. One packet of each variety should be sent, to reach The Director (from whom the necessary entry forms may be obtained), R.H.S. Gardens, Wisley, Ripley, Surrey, by Saturday, August 29th.

## PUBLICATIONS RECEIVED.

"The Gardener's Calendar," a garden guide for every day of the year, by T. Geoffrey Henslow. (Published by Dean and Son, Limited, 29, King Street, Covent Garden, W.C.2., price 2s. 6d.) A practical little book which permits of notes recording work done day by day, and which will thus form a permanent record.

## CATALOGUES RECEIVED.

Messrs. Sutton and Sons, Reading.—Seeds for Summer and Autumn Sowing.

Messrs. Cooper and Nephews, Limited; and Messrs. McDougall and Robertson, Limited.—A Spraying Guide for Insect and Fungus Pests.

Messrs. Austin and McAslan, Mitchell Street, Glasgow.—A List of Flower Show Fixtures for 1925. This list will be sent free to any of our readers who make application, and will be found most useful.



# SIMPLE GARDENING

## WEEDS, SEEDS AND SEEDLINGS.

**D**URING the whole of the month of June it was possible to keep the garden free from weeds without much effort. I say it was possible, but, unfortunately, only a few owners of gardens took advantage of the long, dry spell of weather in this way, judging from the number of gardens I have lately inspected. The weeds in the borders, in the majority of cases, were small, but they seeded in this small state and laid the foundation for a fine crop of seedling weeds which will cause trouble very soon if the Dutch hoe is not freely used. Being small, the weeds in June were not noticed particularly, only in cases where the gardener is given to close observation. Not only does the free use of the hoe kill the young weeds wholesale, but a mulch is also created which breaks the surface crust and lets in air immediately and prevents undue evaporation of moisture from the lower soil. This conservation of moisture induces the roots of plants to penetrate deeper in search of it, which is much better than attempting to bring them to the surface by surface applications of water. In addition to the small, there are large weeds to be dealt with; these will be found in shrubberies, among bush and other fruit trees, in the rows of beans and peas, and even in the cabbage and cauliflower quarters. Hoeing is rarely beneficial in such places; hand-weeding is, if the offenders, when pulled up, are duly destroyed in the smother fire. If they are allowed to lie on the ground, many of them, especially groundsel, will mature seeds there.

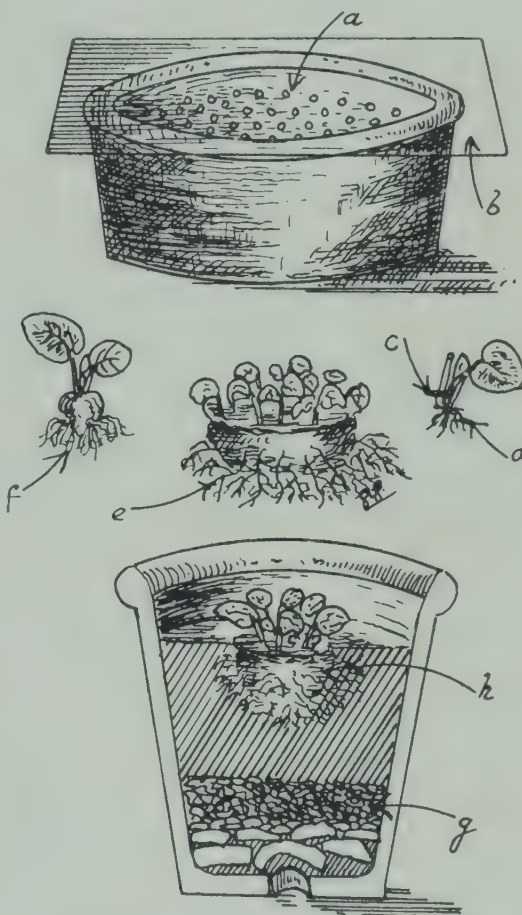
## LETTUCE AND ENDIVE FOR THE WINTER.

These two salad plants are of great value during a season when green salad-ing plants are scarce. In the ordinary way both are easily grown, but at this season they need a little extra attention. If the weather is dry, the seeds for the autumn supply of both lettuce and endive should be sown in drills where the plants are to grow to usable size, and so avoid the work of transplanting and the check to growth. All plants which bleed freely at the roots when the latter are mutilated receive a serious check, and the result, in part, is apparent in the premature "bolting" to seed which, approximately, causes a loss of 15 per cent. in each batch so transplanted. Seeds of these plants are cheap and there are many of them in the smallest packet. It is well worth while spending a few pence more and having a larger packet so that seeds may be sown fairly thickly in the drills. The latter should be shallow and the seeds in them very lightly covered with fine soil. If the ground is almost dust-dry, pour water in the drills before the seeds are sown, but do not water after they are covered no matter how dry the soil may be. Germination will be rapid and sure, and at an early stage of growth the plants should be thinned out to about 8 ins. apart in the case of lettuce and

roins. in that of endive. For this autumn crop the soil should be rich, but for the crop that is to remain almost throughout the winter a soil of medium richness will be best.

## CYCLAMENS.

These are ideal flowers for the amateur's greenhouse, and are economical plants to grow as they do not require much artificial heat during the winter months, and not any from spring to autumn. It is a good plan to make a sowing of seeds late in July or during the month of August where the means for artificial heating are limited, and in early September where unlimited heat is available. As these plants like cool conditions at this season, a cool place in a greenhouse or frame—the latter for preference—should be selected. Pans or pots are better than boxes for both seeds and



young plants. Light turfy loam, peat and leaf-soil, in equal parts, form a suitable compost, with a small proportion of rotted manure for the plants when the latter grow larger and near the final potting stage. Do not use manure for the seed pans. Thoroughly drain the pots or pans with clean potsherds; make the soil level, and dibble in the seeds singly 1 in. apart, as shown at *a*, afterwards covering the pan with glass, *b*. Wait patiently for the seeds to germinate, as they are slow to do so. Keep the soil in an even state of moisture for seedlings and all plants after new growth begins. Old corms, now growing again, should not have any stalks, *c*, removed forcibly, as by doing this the new leaf and crown, *d*, may be pulled up; cut off such stems. Take care of the new roots of old, *e*, and young, *f*, when repotting. Pot corms as shown, providing

sound drainage, *g*, and keep the crown of the corm, *h*, well up in the compost.

## OUTDOOR OR BORDER CHRYSANTHEMUMS AND PLANTS FOR LIFTING.

The earliest varieties begin flowering in July, then a representative collection will provide flowers till November. The later ones receive more moisture and, moreover, flower during a cooler part of the year. For these reasons we should treat our earliest sorts more generously as regards liquid foods from the end of July to the middle of September, and so encourage a more robust growth. It is the general appearance of the plants now that should be our guide as to the amount of feeding advisable. If the stems are thin and hard, the lower leaves shrivelling and those about them turning yellow, then we should thoroughly saturate the soil with clear water and, in a few hours' time, apply weak doses of liquid manure liberally at least once a week. If this treatment be followed for one month, the result will be a fine batch of plants bearing masses of flowers. In some districts leaf-soil is plentiful, and if it is well rotted a surface mulch should be applied, as it will conserve moisture and have a neat appearance. Disbudding should be the rule where a restriction of the number of flowers on a plant will be an improvement; but disbudding should be very carefully done. Plants now growing in an open border, and which are to be lifted and transplanted under glass for flowering to form a succession to those in the borders should be neatly staked out to ensure firm, well ripened wood and leaves. Judicious watering and feeding must be the rule. These few details should be attended to now, as they are important; unripe wood will not bear nice flowers late under glass.

## PREPARE NOW FOR THE AUTUMN GREENHOUSE DISPLAY.

Those who wish to be successful in maintaining a display of flowers in the greenhouse or conservatory throughout the year must look well ahead and make the necessary preparations. Most of the plants for the purpose we have in view now are, at the present time, growing in the open air or in cold frames. Berried solanums, *Solanum capsicastrum* and the scarlet-flowered salvias, coupled with the general favourites, zonal pelargoniums, are all in cool quarters outside, and should be cared for daily. Flower-stems should be removed before the blooms show colour, however eager one may be to see the different colours and shades. Certain shoots will grow longer than the majority; they must be stopped, and all plants should be so treated that the stems will be short-jointed and firm, then such will retain their normal condition in the duller days under glass. The zonals will not require much feeding, but the solanums and salvias should be liberally fed with weak and clear doses of liquid manure and soot water. The colour of the berries will be richer in consequence.

GEORGE GARNER.



# THE GARDEN.

## EBBS' EMPEROR CABBAGE.

most popular Spring Cabbage. Earliest and best in cultivation. Remarkably free from any tendency to "bolt." Awarded Thousands of Prizes. 6d. and 1/- per packet; 1/9 per dozen.

"Your Emperor Cabbage was remarked upon by many persons, not one bolting out of 2,500 plants."—Mr. S. J. Craze, East Park Gardens.

of Vegetable and Flower Seeds for Summer and Autumn Sowing.—Post Free.

B & SONS, LTD., THE KING'S SEEDSMEN, STOURBRIDGE.

## WATERER'S FOR THE BEST IN BULBS

Forcing, Bedding, Naturalising, etc. Autumn-flowering Tulips and Colchicums. Our new illustrated catalogue is now ready. Post free.

WATERER'S ALPINE AND PERENNIAL PLANTS, including all the best in Lupins.

WATERER'S GOLD MEDAL RHODODENDRONS, Azaleas, hardy Shrubs, Yews, Conifers, etc.

WATERER'S NEW ROSE AND FRUIT TREE Catalogue, including all those varieties really worth growing.

descriptive and illustrated catalogues ready shortly.—WATERER, SONS AND CRISP, LIMITED, Twyford (Berks), (near Surrey), and London.

## HAKELEY'S PATENTED HOP MANURE.

The original and only substitute for Stable Manure. See advertisement on back cover.

## M. DUNCAN TUCKER & SONS, LTD.,

Green Road, South Tottenham, N.15.—Conservatories, Glass Houses, Vineries, Peach Houses, Portable Buildings, etc.

## WATERER'S BATHS, GARDEN VASES, SUN-

SHEDS, NESTING BOXES. Catalogue (No. 4) free.—WATERER, SONS AND CRISP, LIMITED, Twyford (Berks), (near Surrey), and London.

## WELLS' CATALOGUE OF CHRYSANTHE-

MS now ready, and will be sent post free on application.—WELLS AND CO., Merstham, Surrey.

## WELLS' THE BIRDS.—Rotless Tanned

NETTING. Small Mesh. As supplied by us to the Royal Horticultural Society. In two qualities. 50yds. by 1yd., 4/-, 6/9; 2yds., 13/6; 3yds., 12/-, 20/3; 4yds., 16/-, 27/-; 25yds. by 8yds., 27/-.

Any size supplied. Carriage paid; approval. per qualities, 3/6 50 yds., measured mesh closed.

## WELLS' NETTING.—From 2/10 per 50yd. roll.

Best House in the Kingdom. Write us for prices. Thousands of rolls stocked. Raffle, 7d. lb., postage extra.

## WELLS' GARDEN HOSE.—1/2 in. by 1-ply., 60ft., 17/6.

Carriage Paid. All sizes supplied.

## WELLS' TENNIS BOUNDARY NETTING.—Lines top

bottom, 25yds. by 2yds., 16/3; 3yds., 18/3; 4yds., 25/3. Carriage paid; approval. Standards for fixing to, also playing poles and all requisites supplied.

## WELLS' MOWERS.—Sale, 5 Riveted Blades,

with wheels, brass bushings, close cutting, highly finished, equalled value, 8in., 20/9; 10in., 22/6; 12in., 25/-. Approval.

## WELLS' TENTS.—Army Bell, All Complete, New

Types. Deep Walls from 55/-. Scout Tents, 24.6. Garden, dining, and all kinds of Tents and Marquees supplied.

## WELLS' WOOD CANES.—3ft., 7d. per doz.; 4/-

per 100, postage 9d. Quantities cheaper. Deck Chairs, 3/9.—B. HAWTHORN, LIMITED, Dept. E., Shrewsbury.

## WELLS' LAXTON'S STRAWBERRIES AND FRUIT

SEEDS.—Our Novelty List for 1925 is now issued, and contains new Apples, Raspberries, Currants, Strawberries, etc. Garden Lovers should have this. Post Free.—LAXTON'S NURSERIES, Bedford.

## WELLS' FENCING.—Chestnut Pale Fencing and

Wire Screening. Illustrated Catalogue on request.—THE WELLS UNDERWOOD CO., LIMITED, 48, Shottermill, Haslemere, Surrey.

## WELLS' DAFFODILS.—Our

of fine New Seedlings, cultivated on our disease-free ground, now ready, and will be sent, post free, to applicants.—B. HAWTHORN, LIMITED, Rotherside Gardens, Rye, Sussex.

## WELLS' GARDEN NETS, tanned small mesh for Fruit

Strawberry Protection, 30 yds. long by 2 yds. wide, 4/6; 3 yds. by 3 yds., 7/-; 30 yds. by 4 yds., 9/-; 30 yds. by 5 yds., 11/-; 30 yds. by 6 yds., 14/- All carr. paid.—COUSSENS & CO., Works, Rye.

## BARR'S AUTUMN-FLOWERING BULBS.—

COLCHICUMS, CROCUS SPECIES, NERINES, WHITE ROMAN and EXTRA EARLY LARGE-FLOWERED HYACINTHS, etc. List on application.—BARR & SONS, King Street, Covent Garden, London, W.C.2.

## IRON AND WIRE FENCING FOR GAR-

DENS.—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—BOULTON AND PAUL, LIMITED, Norwich.

## COLOURED FREESIAS.—My New Price

List is now ready and will be sent on application to G. H. DALRYMPLE, Bartley Nurseries, near Southampton.

## CONTENTS.

	PAGE
Frontispiece: A Rock Garden .. ..	427
Spring-flowering Crocuses. (Illustrated) ..	428
The Rarest Flowers in Europe .. ..	430
Some North American Viburnums. (Illustrated) .. ..	430
Dwarf Phlox for the Alpine Garden. (Illustrated) .. ..	431
Complete Cyclamen Culture. (Illustrated) ..	432
Vegetables and their Diseases. (Illustrated) ..	434
Notes from Contributors .. ..	435
Daphne Blagayana (Illustrated); Freesias—Notes on Culture; Failure of Gypsophila; Torch Lilies; Mesembryanthemum as a Cliff Protector; Preserving Delphiniums; Early Cabbage Varieties; The Yellow Sweet Pea; Rubus alceaefolius.	
Correspondence .. ..	437
Gardening of the Month .. ..	438
Simple Gardening .. ..	439
Ipswich Floral Fête .. ..	440
Book Review .. ..	440
Trade Note .. ..	440

## LOOK! TANNED GARDEN NETS.—All

orders despatched same day. 25yds. by 1yd, 2/-; 25 by 2, 4/-; 25 by 3, 6/-. All carriage paid. Any size supplied. Also Tennis Boundary Nets.—MOORE AND CO., Net Works, Rye.

## FRUIT GROWING LAND.—HEWITT & GATER,

Auctioneers, Southampton, are offering, on July 27th, 1925, upwards of 120 acres (in convenient lots) of the finest early fruit growing land at Sarisbury Green, midway between Southampton and Portsmouth, in the centre of the Hampshire fruit growing district, together with an attractive small residence and two very superior cottages. All the land and houses are freehold and vacant. Particulars and plans ready.

## BARGAINS IN GARDEN WIRE, ETC.!!

Government paid twenty times our price. Ideal for training Peas, Tomatoes, Fruit Trees, Arches, Logans, Beans, Hops, Greenhouses, Pergolas, Chrysanthus, Tying, Fencing, etc. Steel-stranded, waterproof covered, durable. 19/6 mile (full 1,760yds.). Small lots quoted. Get free Samples and list 300 bargains. Postcard to-day!—GREEN'S GOVERNMENT STORES, 213, Albert Street, Lytham.

## SIKKIM - HIMALAYAN ORCHIDS.—12

different grand-flowering sorts, 25/-; 6 different Cymbidiums, 24/-; 6 Renanthera imschootiana, 25/-. Post free in U.K. Catalogue free.—THE CHANDRA NURSERY, P.O. Rhencok, Sikkim (Bengal), British India.

## POULTRY BARGAIN, 300 month old White

or Brown Leghorns, 1/6 each, 18/- doz.; two month, 3/-, 36/-; three month, 4/-, 48/- doz. Carriage paid.—CONTI FARM, Stratford, Essex.

## CYCLAMEN—SOW NOW!—In six colours,

or mixed, 2/6 per packet; also Corms (dormant, ready to pot-up), 1/3 each or 12/- dozen, and young plants for potting-on, 9/- dozen. Our famous strains, including Salmon King, Pink Pearl and Cherry Ripe, the nearly scarlet variety.—STUART LOW AND CO., Bush Hill Park, Enfield.

## SUTTON'S CABBAGES.

The best varieties for spring cutting are:

Sutton's Harbinger .. .. per packet, 1/- and 1/6  
Sutton's April .. .. per packet, 1/- and 1/6  
Sutton's Flower of Spring .. .. per packet, 1/-; oz., 1/6

"I have never grown such lovely Cabbages as I have this Spring from your Harbinger seed. Of 5,000 plants not one bolted. I can strongly recommend Harbinger as the finest Cabbage in cultivation for Autumn sowing."—Mr. J. Parkins, North Hill.

SUTTON & SONS, THE KING'S SEEDSMEN, READING

## BEFORE ORDERING BULBS, ROSES,

Sweet Peas, etc., you should procure a copy of our Autumn Catalogue, featuring latest Novelties, ready Mid-August. Apply now.—DOBBIE AND CO., LIMITED, The Royal Seedsmen, Edinburgh.

## CHEAP GOVERNMENT WIRE!!!—Great

for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—GREEN'S GOVERNMENT STORES, 69, Albert Street, Lytham.

## FULL OF WISE SAWS AND MODERN

instances our catalogue offers all that is brightest and best for the present day garden. The choice plant at Sixpence a time may be often sought, but it is seldom obtained. You can get it from us. Catalogue free.—FEILDEN AND CROUCH, 2, Fairseat Nurseries, Wrotham, Kent.

## NEW ZEALAND PLANTS for Seaside

Gardens.—Pittosporum nigrescens for hedges, pot grown plants for planting now, 18/- per doz. Olearia Macrodonata, 14ft., 12/- doz., splendid for hedges. Olearia Haasti, 1ft., 12/- per doz. Brachyglottis repanda, 2/6 and 3/6 each. Clematis indivisa, 2/6 each. Ozothamnus 2/6 each. Muehlenbeckia complexa, 1/6 each.—TRESEDER AND CO., The Nurseries, Truro.

## SEWAGE DISPOSAL FOR COUNTRY

HOUSES.—No emptying of cesspools: a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—WILLIAM BEATTIE, 8, Lower Grosvenor Place, Westminster.

## PRIMULA AND ALPINE SEEDS from

choice (1,500 collection). Rare Seedlings and Rockery Bulbs. Lists free.—REV. J. F. ANDERSON, Glenn Hall, Leicester.

## GARDEN NETS.—Best tanned, small mesh,

25yds. by 1yd., 2/-; 25yds. by 2yds., 4/-; 25yds. by 3yds., 6/-; 25yds. by 4yds., 8/-; Carr. Paid. Satisfaction Guaranteed. Tennis Nets from 10/-. Special nets for tennis boundary. Pea training nets. Lists and samples free.—G. JARRETT, Net-maker, Rye.

## JAMES BACKHOUSE, F.L.S., F.R.H.S., for

many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to CAER FEGLA, Arthog, North Wales.

## THE WELSH BULB FIELDS were awarded

the Gold Medal at the Dutch International Show last April.—A list of Daffodils, Tulips, and other Bulbs will be sent on application to the Secretary, THE WELSH BULB FIELDS, St. Asaph.

## IMPROVE YOUR GARDEN by the use of

solid Oak Trellis Screens; they are ideal for growing creepers of all kinds and for securing privacy, at the same time adding an artistic feature that will last a lifetime (being pickled in preservative). No trouble to erect (being made in sections). Send for lists and get an estimate from W. T. REVITT, Railway Works, Olney.

## GREENHOUSE PAINTING AND GLAZING.

—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7lb. tins, 4/-, pos free; 14lb. tins, 5/6 each, carriage extra, tins free.—Full particulars from W. CARSON AND SONS, Grove Works, Battersea, S.W.11.



**SOMETHING  
NEW AND  
GOOD  
TO BE SOWN  
- NOW -**

Cyclamen "SCARLET KING." A great acquisition. Colour of the Hollyberry; neat habit and very early blooming. THE plant for Xmas. SEEDS, 2/6 and 5/- per packet.

Cyclamen "BATH BEAUTY." A giant salmon pink, bearing enormous flowers, quite equal to our "Giant White" in size. A lovely colour with beautifully marked foliage. Habit extra good. SEEDS, 2/6 and 5/- per packet.

#### OTHER GOOD SORTS

BRILLIANT, rosy carmine. FAIRY QUEEN, frilled white. GIANT WHITE, unequalled. GIANT CRIMSON, extra fine. GRANDIFLORA, white, crimson base. MRS. BUCKSTON, frilled salmon. SALMON SCARLET. SALMON KING. - - SCENTED, white, crimson base.

All the above at 1/6 and 2/6 per packet each sort.

FINEST MIXED .. 1/6 and 2/6 per packet.

**Blackmore & Langdon, Bath**

Please mention THE GARDEN when writing.

#### SOIL PESTS DESTROYED

by "ALPHOL"

Sample 14 lb., 5/6 carr. paid

Write for particulars of this and other reliable Garden Helps, Lawn Improvers, "Veribest" Seeds, etc., to

Garden Supplies, Ltd., Cranmer St., Liverpool

#### KING'S ACRE STRAWBERRIES

New List of the Best Varieties, with helpful Cultural instructions, including all other useful Berries.

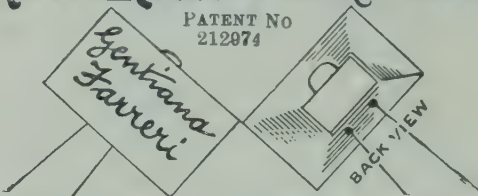
A most useful List, post free on application

**KING'S ACRE NURSERIES, Ltd., Hereford**

Please mention THE GARDEN when writing.

#### The WIZARD Plant LABEL

PATENT NO  
212974



Made in Red Pottery, 2 1/2 x 1 1/2 ins., with rustless wires, 12 in., 2/- doz.; 7 in., 1/7 doz. 1 1/2 x 1 in., with wires 6 in., 1/4 doz. For tying on, 1/6 and 1/3 doz. Waterproof Ink, 9d. and 7d. bot. Crow Quills, 2d. Postage extra. Highly commended by the R.H.S. at Wisley.

E. TORKINGTON . NEW HALL . MAIDENHEAD

GARDEN DESIGN is best dealt with in "Planning and Planting of Little Gardens," by G. DILLISTONE, 6/-; by post, 6/6. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

#### Notes from Maidstone.

#### A HANDBOOK OF FRUITS.

By E. A. Bunyard.

The second and concluded volume of this work is now published, and contains the Stone Fruits, Cherries, Plums, Peaches, etc., and the Bush Fruits, such as Gooseberries, Currants, Strawberries, and Raspberries. May be obtained from us direct for 10/10 post free, or from any bookseller. Publisher, Mr. John Murray.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.

## BULB CATALOGUE

—NOW READY—

Free on application.

**Bulbs direct from Growers  
for Christmas Flowering**

**HYACINTHS**, 1st size, 10/6 per doz.

Dutch White, French grown, recommended .. 5/9 per doz.

„ 45/- per 100

French White Romans, 50/- and 60/- per 100

**FREESIAs**, now ready, 8/6 and 10/6 per 100

## ALFRED DAWKINS

17 years Manager Seed & Bulb Dept.  
Messrs. James Veitch & Sons, Ltd.

408, KING'S RD., CHELSEA, S.W.10

Please mention THE GARDEN when writing.



You can destroy weeds with Weedicide—clear the garden paths, drives, etc., and do it quickly with the weedkiller that has been "Highly Commended" by the Royal Horticultural Society.

### COOPER'S WEEDICIDE

1 gall. (price 9/-) dilutes to 100 galls. water; the cost of the ready-for-use weedkilling mixture is, therefore, just over 1d. per Gallon.  
1 pt. tin 2/-; 1 qt. 3/3; 1/2 gall. 5/6; 2 galls. 17/-; 5 galls. £1 18/6

**HERCULEAN LIQUID WEEDKILLER**  
is equally efficient but half the strength (1-50 parts water)  
Pt. 1/8; Qt. 2/9; 1/2 gal. 3/9; 1 gal. 6/-; 2 galls. 10/6

**HERCULEAN POWDER WEEDKILLER**  
Small tin to make 12 1/2 galls. 1/9; Medium size to make 25 galls. 3/-; Large size to make 100 galls. 11/-

If unable to obtain from local agent, please write

**WILLIAM COOPER & NEPHEWS, Ltd., BERKHAMSTED.**





VOL. LXXXIX.—No. 2802.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
*Editorial Offices:* 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. *Offices for Advertisements:* 8-11, SOUTHAMPTON STREET, STRAND, W.C.2  
 Entered as Second-class Matter at the New York, N.Y., Post Office.

AUGUST 1, 1925



THE SECRET OF GOOD ROCK GARDENING LIES IN REACHING TO THE VERY HEART OF ALPINE NATURE. IN THIS ROCK GARDEN MAY BE SEEN A HARMONY OF LINE, A PLEASANT SENSE OF PROPORTION AND CONTRAST AND, ABOVE ALL, THE ATTAINMENT OF THAT INDEFINABLE SOMETHING WHICH IS ONE OF NATURE'S CHARMS. EVERYWHERE ARE HAPPY COMBINATIONS OF FORM AND COLOUR WHICH RENDER THE ARTISTIC MERITS OF SUCH A GARDEN SO ARRESTING.



# SPRING-FLOWERING CROCUSES

BY H. A. GREATOREX.

WITHIN THE NEXT FEW WEEKS, BULB CATALOGUES WILL BE SCANNED AND VARIETIES SELECTED TO ADORN THE GARDEN NEXT SPRING. THE TINY BUT GRACEFUL CROCUSES CRAVE THEIR FULL SHARE OF ATTENTION AND A NUMBER OF THE SPECIES MENTIONED IN THIS ARTICLE SHOULD BE TRIED.

THE same kind of post-war confusion fell upon the winter and spring-flowering crocuses offered by the trade as afflicted those that flower in the autumn. There was the same disposition to confuse the identities of certain closely allied forms, the same inclination to send one common species—*Tomasinianus*, in this case—for almost anything that was ordered, the same evidence of mixed and impure stocks, and lastly, the same tendency towards improvement, till to-day, with quite a small number of exceptions, all the kinds offered may be trusted to be true to their respective names.

One of the first of the crocuses to brighten the short days of the New Year is *Imperati*. I have found this listed in three forms: the type, *albus* and *Maw's No. 1*. What the latter should be like I do not know. What I have actually received under this name is the Dutch monophyllous form. I have not seen it listed since 1920, nor have I received it since that year, though I have seen it from a Dutch source in a neighbouring garden. Not only does it fail to produce seed with me, but in five years it has formed scarcely any off-sets.

In 1920 this same Dutch form was sent to me when I ordered the type. But since that year an order for the type has always produced an interestingly varied assortment of the typical diphyllous forms—some plain, some lightly and some the heavily feathered, most with the exterior buff of a greyish drab tint, but a few with the buff of a richer yellow hue. The only white form I have so far got is the one in which the inner segments are faintly tinted with lilac, and the outer striped on a yellow buff ground to a slight but varying degree, with pale, rather muddy lilac.

Five other members of the *Imperati* group are listed. They call for small comment. *Suaveolens* does not seem to be obtainable yet. At any rate, what I always get for it is *Tomasinianus*. *Corsicus*, *minimus* and *etruscus* may be quite relied upon, though there is a richly feathered form of *etruscus*, supplied by Messrs. Barr under the varietal name *superbus* which is so extraordinarily like *corsicus* in appearance and so very unlike the plain forms sent under the type name, that one may well be excused for thinking that a mistake has been made. Apart from the difference in the corm tunics,

I find the two species easily separated when in flower, by the fact that in *etruscus*, as I receive it, the throat is bearded, and in *corsicus*, glabrous. All the individuals of *corsicus* sent me



ONE OF THE FIRST SPECIES TO RAISE ITS HEAD IN EARLY SPRING, *C. IMPERATI*.

by Messrs. Barr in three separate years have identical featherings. In *minimus*, on the other hand, it is difficult to find two alike. The two species are easily separated by their proper spathes, diphyllous in *minimus*, and monophyllous in *corsicus*. *Minimus* has the smaller and prettier flower. Finally *versicolor* in two forms, one with a lilac ground, is true enough.

The spring-flowering members of the annulate group are represented in present-day lists by three species, *biflorus*, *chrysanthus* and *ærius*. Five years ago the only form of *chrysanthus* I succeeded in getting was the variety *fusco-tinctus*. *Fusco-lineatus* was also listed, but in place of it I received a small, dull form of *speciosus*. It has since dropped out of the lists. *Fusco-tinctus* is a pleasing crocus. Its flowers are small, but the bright golden yellow of its interior gains an added richness from the backing of the evenly stippled brown of the outsides of the outer segments, and contrasts brilliantly with the black of the anthers. Last year Messrs. Barr offered several varieties of *chrysanthus*, some white, some yellow. Their *chrysanthus pallidus* is not the form described by Mr. Bowles and figured by Moon in the second volume of "*Flora and Sylva*." It has a fine globular blossom, but is of a medium yellow colour with some obscure greyish featherings, and no sign of black barbs to its anthers. "*Pallidus feathered*" is very different. It has smaller flowers with more pointed segments, with a varying amount of brownish feathering on a pale sulphur ground, some paler than others, and some with and some without black barbs to the anthers. It is an exceedingly pretty crocus. A rather curious form is "*Quaintness*," yellow within and with the exterior evenly washed over with reddish brown, through which yellow brush marks show. Only two feathered white forms have reached me, Mr. Bowles' "*Snow Bunting*," a pretty flower with only slight featherings and black barbs to the anthers; and a *chamlijah* form which, although it lacks the black barbs, has its featherings, so like those of Mr. Bowles' seedling "*Bullfinch*," that there can be little doubt of its identity.



*C. SIEBERI* DELICATELY TINTED BUT A ROBUST GROWER.



The large form of biflorus, known as the Scotch crocus, is quite true. The same can be said of the variety *Weldenii*, which embraces a number of forms from pure white ones to those which have the rich purple exterior of the *Alexanderi* type. Some are small and of a poor, ragged shape; but the best coloured specimens have fine large globose flowers. *Biflorus Barrii*, as I get it, is mixed. Most of the corms produce long, cylindrical buds, very heavily feathered. These flower very late—not until the Scotch crocus has finished—and are, I have little doubt, the real *Barrii*. With them are other corms producing much narrower leaves and short, ovate buds, with three lightly feathered stripes, flowering a little earlier. The same mixture comes to me as *biflorus pusillus*. Lastly, the beautiful *ærius* and its variety "*celeste*" are expensive, but quite true to name.

The rather bewildering group of little yellow crocuses related to *aureus* have been too much for British nurserymen. The earliest of them, *vitellinus*, is listed, but when I order it I get an unstriped form of *graveolens*. There is no doubt of this, the pale yellow of the exterior and the extraordinarily evil smell being unmistakable. Mr. Bowles tells me that Messrs. Van Tubergen have the true *vitellinus*. *Graveolens* itself is listed, and is true enough. Those which I receive are striped more or less with brown. It has pretty little starry flowers, and would be very desirable, if it were not for its dreadful smell.

Two other small yellow crocuses listed are *Olivieri* and *candidus subflavus*. The latter is true to name. The former, however, as sent out by Messrs. Barr, has relatively such narrow leaves, and its throat and perianth tube so stained with purplish grey, that I long suspected it to be *Suterianus*, a suspicion which Mr. Bowles confirms. *Aureus* itself is quite true. It is of a most gorgeous shade of deep orange, almost pinkish orange in the bud, and grows very freely from self-sown seed. Of its derivatives two are listed, the Dutch yellow and *aureus sulphureus*. The latter is the concolor form. Four or five years ago I received under the name *stellaris* a crocus which at the time puzzled me very much. It had small, rather pale yellow flowers, decorated on the outside with three brown stripes. It is certainly not *stellaris*, and I have little doubt that it is one of the striped forms of *aureus sulphureus*. The only other member of the group listed, the very distinct looking *Korolkowi*, can generally be obtained, though occasionally *Salzmännii erectophyllus* is sent in its place.

*Banaticus* I have had from Holland. It is rather a poor doer. Besides the common garden forms of *vernus* a few small-flowered wild forms are offered, the prettiest of which is *vernus "l'unique"*. Its blossoms are of an unusual shade of pale purplish pink, but it shows signs of dying out with me. *Siculus* from Mr. T. Smith of Newry, on the other hand, takes care of itself well but its small flowers are of a rather unexciting streaky purple. My slugs inform me that it has a better flavour than any other crocus in flower at the time.

*Tomasinianus* in many shades of amethyst can be obtained without difficulty. It has a way of appearing when all sorts

of other crocuses are ordered. A pretty white form reached me as *longiflorus melitensis*. Last year Messrs. Barr offered some of Mr. Bowles' beautiful variety *pictus*, and although late planting has made them rather pale and variable, I have not much doubt that they are true.

That delicately tinted, but robust grower, *Sieberi*, is obtainable only in the lilac Greek form. *Susianus*, with its rich mahogany exterior and distinct form presents no diffi-



THE RATHER DAINTY AND UNMISTAKABLE *C. FLEISCHERI*.

This species is nearly always supplied true to name.



ONE OF THE MANY WHITE VARIETIES OF *C. CHRYSANTHUS*.

Showing the dwarf habit of some of the flowers.

culties. It would be one of the best of all crocuses if it would flower more freely. *Stellaris* can now be obtained, though a few years ago Messrs. Barr sent out for it the really much more interesting striped *aureus sulphureus* mentioned above.

Finally, *Fleischeri*, with its remarkable corm tunic is quite unmistakable, and I have never found any disposition on the nurseryman's part to send anything in its place.



## THE RAREST FLOWERS IN EUROPE

**R**ARITY for its own sake appeals to the collector of postage stamps, but not to flower lovers, unless they be keepers of museums rather than of gardens. Yet there is something intriguing about a beautiful flower that hails from one place alone in all the world. Many plants are peculiar to one range only in the mountains; but I have in mind those that belong to a single hill or even rock. I imagine that even a schoolboy knows the wide-saucered blue or white bellflower that trails its beauty from many a hanging bowl in cool greenhouse or cottage window. From a few yards of rock, on which alone it grows in nature, on the small Cape of Noli that juts out into the Mediterranean not far from Genoa, *Campanula isophylla* has jumped into the homes of the people. *Daphne rupestris*, that shuns every limestone precipice on the Tombéa but one, and every mountain but Tombéa, bids fair to jump as far, when once the demand for its rose-pink stephanotis-like flowers and entrancing fragrance has compelled a supply at less than the guinea

it now commands. *Viola cornuta* is as beautiful as common, in English gardens or on the Pyrenees; but its lone outpost across the breadth of France, where the high hillock of Grammont looks down on the Castle of Chillon across the Lake of Geneva, gives me the impulse to collect it just there, where it has been established by some strange freak. The most fragrant of the violets, the most unknown, *Viola Comollia*—of kinship with *Dubiana* and the other fine *cenisias* which are the unapproachable Ladies Vere de Vere of the mountains—is the rarest of the rare on only a scree or two of the Alps that stretch eastwards of Como, is as difficult to grow as to find, and as beautiful as it is unique with its light wine-rose petals endorsed with buff. One Corsican mountain alone stands sponsor for a dwarf columbine of the first water (yet who has seen it?); and the cape that projects from the northern end of the island like a carbuncled nose, is the sole nursery of a sensational alyssum of normal gold and abnormal 3ft. stem. If this be a giant rarity, *Thlaspi cepeæfolium* is a

pigmy one—the least in stature, the highest in quality of the iberis-like *thlaspi*, very different in habit from either of the two others that have found admittance to the alpine garden. This tiny treasure is almost entirely restricted to the low pass that cuts the Julian Alps in two near the new frontier of Italy and Jugo-Slavia, where the tourist struggles with names like Bohinska Bistritza, which he had never imagined outside of musical comedy. Not very far away there is a plant on which the limelight has been shed by no less than Baedeker, unrivalled guide but no botanist. Many a time and oft have I been unhappily lured by the words “rich flora” scattered throughout the fat little red books; and in one instance alone does Baedeker particularise as to what his rich flora might be: “Near Hermagor,” he relates, “grows the *Wulfenia carinthiaca*, a beautiful plant with dark blue flowers, found nowhere in Europe except on the slopes of the Gartnerkofel”—and nowhere else nearer than the east of Asia.  
E. ENEVER TODD.

## SOME NORTH AMERICAN VIBURNUMS

BY E. H. WILSON.

MANY OF THE FINEST VIBURNUMS IN CULTIVATION ARE NATIVES OF NORTH AMERICA, AND AS YET THEY STILL AWAIT INTRODUCTION TO OUR GARDENS, WHERE ASIATIC AND EUROPEAN SPECIES ARE MORE COMMONLY GROWN.

**A**MONG the tree viburnums with deciduous leaves none is handsomer than *V. prunifolium*, the black haw. Native of eastern North America, it grows naturally on rocky hillsides and the borders of woods, and apparently delights in exposed situations. It is a small tree, occasionally 30ft., but usually from 15ft. to 20ft. tall, with a single trunk clothed with fissured bark and a shapely crown of straight, spreading branches clustered with numerous short, spur-like

branchlets. These give a rugged character to the plant, whose habit resembles that of certain hawthorns. The leaves on red-purple petioles are oval, pointed or blunt, about 2ins. long and 1in. broad, smooth and dark green, and in the autumn turn a deep rich wine colour. The flowers are all fertile, pure white and are borne in flattened, rather small clusters which are abundantly produced about the end of May and early in June. Attractive in habit of growth and freedom of



ONE OF THE MOST HANDSOME OF THE TREE VIBURNUMS, *V. PRUNIFOLIUM*, THE BLACK HAW.



*VIBURNUM CASSINOIDES* WREATHED IN BLOSSOM. IT IS EXCEEDINGLY BEAUTIFUL WHEN IN FULL FRUIT.





THE ROUND-TOPPED V. CANBYI, THE LAST SPECIES TO OPEN ITS FLOWERS.

blossom, this viburnum is most beautiful when in fruit, which is borne in drooping clusters. It is relatively large, ovoid, changes as it ripens from green to pink and finally to dark blue, and nearly black at maturity when it is covered with a glaucous bloom.

In the Arnold Arboretum native shrubs either in groups or singly are freely used in the borders and by the roadsides. Since it is so very beautiful in fruit, *V. cassinoides* in several hundreds has been planted. The fruit as it ripens becomes first cream-coloured, then pink, and finally blue-black and bloomy. In the early autumn fruit of the three colours is present in the same clusters, and the effect is very lovely.

As we grow the viburnum it is a shapely shrub from 4ft. to 10ft. tall, with numerous ascending branches, but in a wild state it is often 20ft. high and of straggling habit. The leaves are variable in size, more or less oblong to broad-oblong and pointed, thick in texture and shining dark green; the flowers are cream colour with prominent stamens, and are produced many together in broad convex clusters which terminate every shoot in mid-June. The fruit ripens in September, and is ovoid in shape and about one-third of an inch long.

This viburnum is a common plant in north-eastern North America, and seems equally happy in swamps or on dry rocky slopes. So useful a shrub ought to be better known in British gardens.

The last viburnum of the season to open its flowers is *V. Canbyi*. This is native of eastern North America, and blossoms about the end of June and early in July. Vigorous and densely branching, it forms a round-topped bush 10ft. to 15ft. high and broad, and is well suited for using as a specimen shrub or as a screen. The

rich shining green leaves are roundish, prominently veined and coarsely toothed. The flower-clusters are flattened, round about 3-4ins. in diameter, and are densely crowded with pure white fertile flowers with prominent outthrust yellow-anthered stamens; the fruit is small, ovoid and dark blue in colour. In the autumn the foliage is tinted wine colour to rose violet.

This viburnum grows naturally in moist woodlands, but in the Arnold Arboretum, where it has been freely planted, it grows well in any situation. Of rapid growth, it quickly makes a good bush, and is handsome either in flower, fruit or when decked in autumn foliage.

## DWARF PHLOX FOR THE ALPINE GARDEN

NOW IS THE TIME TO MAKE PREPARATIONS FOR NEXT YEAR'S DISPLAY IN THE ROCK GARDEN. SPACE SHOULD BE FOUND FOR A FEW VARIETIES OF DWARF PHLOX TO ENSURE A TOUCH OF BRIGHT COLOUR AMONG THE OTHER ALPINES.

**E**VEN amid all the welter of gay colour that floods the slopes of the rock garden in May and June, the various "mossy" and dwarf phlox are capable of making their mark among the severest competition and forming cascades of brilliant flowers which "carry" far and wide. Not only is the colour range a wide one, but the species, too, are extensive and the variation in habit enables us to employ them in a variety of positions and thus gather up the fullest possible measure of their artistic possibilities. Upright growers, such as *divaricata*, with its erect stems 6ins. high and wonderful blue flowers, are simply glorious where used in large pockets either on a level with or below the eye. Another form of this, *Laphamii*, is very much larger, so far as the flowers are concerned, but the colour is not so clear.

A splendid form is the newer *Violet Queen*, whose colour is aptly described by the name. An exquisite little species of mat-like habit, with leaves so closely crowded together that they have a moss-like effect, is *Douglasii*; the tufts



SHEETS OF DAZZLING WHITE PRODUCED BY THE MASSING OF ALPINE PHLOXES IN THE ROCK GARDEN.



of green foliage are studded all over with lavender blue flowers which, when smelt, prove to be deliciously fragrant. *Amœna*, instead of clustering close to the earth, rises to a height of 6 ins. and bears small heads of large deep rose flowers during the month of June. *Ovata caroliniana* is a specially neat grower, about 1 ft. tall, that carries on its flowering season into August; the tufts of foliage are very close and terminate in heads of vivid rose pink flowers that are most effective.

The variety *procumbens* is especially valuable and interesting. To begin with, it is the effect of crossing *P. pilosa* and *subulata*, and has resulted in a very robust prostrate plant with masses of rosy mauve flowers that make a great display. The plant has the desirable quality of flowering again in autumn, a fact that suggests great possibilities by re-crossing backwards with the object of producing a similar desirable habit in the *subulata* varieties. Of *pilosa*, the most highly coloured form is *Brilliant*, a useful dwarf with intense rosy crimson flowers. *Stolonifera* deserves to be included if only for its early-flowering

habit, though its claims are much greater than this; the plant is in the form of tufts of light green foliage surmounted by heads of intense rose flowers. *Verna* provides quite a contrast to this, for the leaves are in masses of deep olive green with—again—rose flowers. For sloping pockets where vivid colour is the important thing, both *Stellaria* (starry phlox) and *subulata* (mossy phlox) are extremely valuable, and a large number of varieties of each are available.

All the *Stellarias* are vigorous growers and rapidly make handsome patches. There is much confusion between these and the *subulata* section. All the following, however, are true *Stellarias*: *Annulata*, milky white with a purple ring; *Bridesmaid*, pale lilac with a deeper centre; *G. F. Wilson*, lavender blue, very free both in growth and flower; *Newry Seedling*, with starry mauve flowers; and *Seraph*, white with blue-eyed flowers.

The *subulatas*, with their mossy deep green foliage, are simply invaluable and should be lavishly used. These, by the way, look splendid when two or

more varieties are planted side by side and run into one another in the course of their growth. Of these, *atropurpurea*, ruddy crimson; *Brightness*, rose with crimson eye; *Frondosa*, rose flowered with crimson eye; *Fairy*, rose with purple eye; *Kathleen*, lilac with crimson eye; *Little Dot*, pure white; *Nelsoni*, white with crimson eye.

Another use for the procumbent species is as a groundwork for beds of the May-flowering Darwin or cottage tulips. These flower simultaneously and, with the varied colour range of both tulip and phlox, remarkably beautiful effects can be planned. Propagation is very easily effected by means of cuttings taken immediately after flowering. These should be inserted in very sandy soil in cold frames and kept moist until well rooted, when they may be planted out at once in their permanent quarters. In selecting the position for planting in the rock garden, etc., the importance of abundance of sunlight should not be overlooked. A strong, rather stiff loam is the best, for in a light dry soil flowering soon comes to an end.

H. W. CANNING-WRIGHT.

## R COMPLETE CYCLAMEN CULTURE

WHEN MAKING UP YOUR BULB ORDER THIS AUTUMN THESE UNUSUAL AND GAY LITTLE GREENHOUSE PLANTS SHOULD NOT BE OVERLOOKED.

NOTHING could possibly be simpler than successful culture of the cyclamen, and certainly nothing could be more beautiful than the exquisitely coloured butterfly-like flowers, poised above the deep green rounded leaves that so gracefully clothe the surface of the soil in which the corms are growing. In common with many other flowers, remarkable improvements have been effected in recent years, and we cannot too strongly commend the purchase of a really good strain of seeds from which to raise the supply of plants.

Many varieties are named, and one gains the advantage by purchasing these in splendid colours which are true to type, for special care has to be taken, in this case, in the selection of the seed parents. Special attention may here be directed to the *Sheepwell* strain, which, in addition to giant size and splendid colourings, adds the further charm of a powerful and distinctive fragrance. Another interesting "break" that is worth noting is the silver-leaved strain. In this, the leaves are of giant proportions with a broad silver zone on a deep green ground, while the flowers are a bright salmon-rose. A few of the best of the named varieties are *Giant White*, *Firefly*, *Giant Shell Pink*, *Vulcan*, *Queen Mary*, *Salmon Scarlet*, *Carter's White Swan*, *The Sultan*, *Crimson*

*St. George*, *Scarlet King*, *Webb's New Scarlet Queen*, *Salmon Queen*, *Bath Beauty*, and of the excellent "*Caledonian*" strain the varieties *Lady Helen Cassel*, *Septimus F. Beck*, and *Giant White Wonder* are beautiful both in shape and colour.



CYCLAMEN SALMON QUEEN WITH VARIEGATED FOLIAGE.

At the outset of this note, we expressed the opinion that culturally "nothing could be simpler," but the whole secret of this rests upon one point—you must keep them continuously growing, right from the day when the first leaf appears until the finality of flowering is reached. Never must there be a single day's pause or check or your plants will suffer.

Sowing may be done any time during August, September or even October, but an earlier date than the latter is to be preferred, as it gives a longer period of growth. Special care should be taken when crocking the pans in which the seeds are to be sown. The compost should consist of a mixture of fibrous loam, old manure from an exhausted hot-bed, and plenty of coarse silver sand. Press this down moderately firmly, and then water with a fine-rosed can, and all is ready for the operation of seed sowing. The best mode of doing this is by dibbling in each seed separately, at distances of an inch apart. It is sometimes recommended to cover the seeds, to a depth of half an inch, with soil; but we prefer the shallowest possible covering that will hide the seeds from view. To guard against their becoming too dry, cover the pan with a sheet of brown paper and place a pane of glass over that. A brisk warmth is necessary to germinate the seedlings quickly and

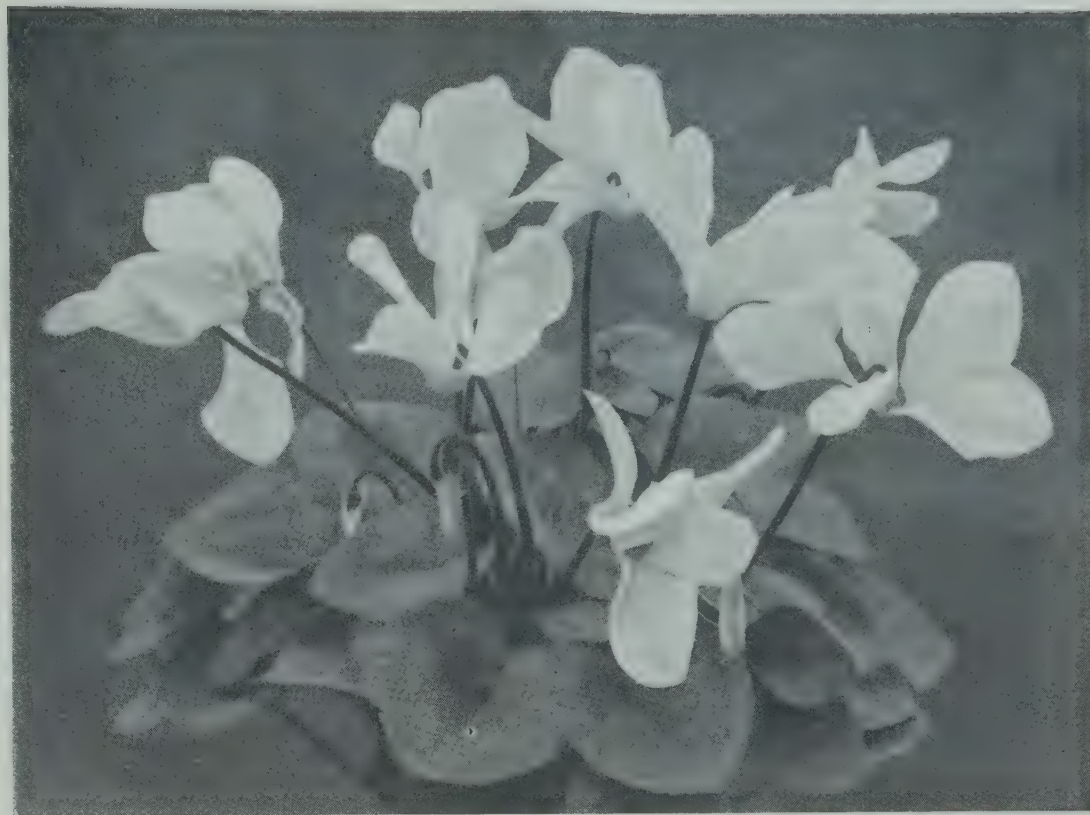


evenly and a minimum of 55° Fahr. is about correct. Directly germination takes place, remove the paper and glass and place the pan on a shelf so as to ensure the sturdiest possible growth—but take care that they are not scorched by sudden bursts of strong sunlight.

Pricking off need not be done until the leaves begin to touch each other, but care must be taken to keep the soil evenly moist. While a cool airy atmosphere is desirable for the promotion of the sturdiest growth, a strict watch must be kept that this never becomes too dry. Abundance of atmospheric moisture is the greatest aid in keeping them growing continuously, for once the outer casing of the corm becomes tough, which it quickly does in a dry atmosphere, good plants cannot result. By early February the little plants should have made sufficient progress for transfer to single pots, and a similar compost to that recommended for sowing can scarcely be beaten. The time for potting depends, of course, upon the progress made, the best time being when the seedlings are making their fifth leaf.

Observation will show that it is just about this time that strong roots begin to push out, and therefore they establish quickly under the new conditions. Especial care should be taken at this time to see that plenty of atmospheric moisture is present, and no better place can be found for standing the pots than on a staging covered with shingle or ashes that are constantly damped.

Potting must be done in the correct way, *i.e.*, so that the corm "sits" upon the top of a small mound of soil which slopes away on all sides to the rim of the pot. Lift the plants from the pans or boxes with plenty of soil adhering to the roots, drop them into the pots firm only by tapping the base of the pot on the bench. The cyclamen appreciates a loose soil, and there must be no pressing with the fingers or the soil will be too hard and roots will not run freely. Use



ONE OF THE FINEST VARIETIES OF THE PERSIAN CYCLAMEN, GIANT WHITE.

tepid water for watering the soil, damp overhead twice daily, shade from bright bursts of sunshine and run the temperature up a few degrees, all of which aids in quick-rooting and re-establishment of the young plants.

Through the late spring and summer, the chief needs will be regular watering and syringing and keeping the plants as cool as possible. After the lapse of about eight weeks, sufficient progress will have been made to permit of transfer to the flowering sized pots, which should be the 6in. or 7in. size, according to the vigour of the tubers. Follow the same methods as before, but use rather less sand and reduce the quantity of air admitted to the house for a short time until the roots get actively to work

again. Through the summer, the plants do excellently when plunged in ashes in cold frames, and these, if facing north and judiciously ventilated, ensure the necessary coolness which is so essential to healthy growth.

By early October, plenty of buds will be forming and the plants should at once be placed in a good light position in an airy house, where, after a week, feeding with weak liquid manure may be commenced. Correct potting and care in watering will do much to prevent that troublesome decay that sometimes affects the corms. Take care to water early in the day and pour it on the side of the soil, so as not to flood the centre of the corm. All faded leaves and flowers that have to be removed must be pulled right out, not cut off so as to leave a bit of the base of the stalk still attached to the corm, or decay is certain to be set up.

Seed saving and cross pollinating is interesting work, and for this a few of the best plants should be set aside in a place by themselves. Cross pollination is readily effected by means of a camel-hair brush. Do this when the sun is bright, so as to ensure dry pollen, and take care that the seeds are fully developed before you pluck the capsules from the plant and also that the pod has thoroughly dried before you remove the seed from the capsule. Where such work is being carried out, a fair amount of attention should be devoted to the operation. The instruments, such as a brush and a pair of forceps, must be carefully sterilised each time, if it is intended to cross a few varieties at the one time, otherwise the results may be difficult of interpretation. After crossing has been accomplished, and seeds have been obtained, it is advisable to raise the resulting plants apart from the ordinary varieties, noting any peculiarities which may occur during their growth.



A FINE FLOWERED CYCLAMEN SEEDLING.



# VEGETABLES AND THEIR DISEASES

## BEET.

**T**HIS excellent salad plant and winter vegetable attracts hordes of sparrows in every district where sparrows are encouraged to nest. They eat the leaves when the latter are about 3 ins. high, and, unless stopped forthwith, cripple the young plants seriously. Nets, of fine enough mesh, are the surest protection, but I have found black cotton, two strands to each row, very effective, too. The cotton should be placed in position when the seedlings are tiny, being fastened to short sticks 3 ins. above the tops of the plants. This, of course, is only a temporary trouble, as the sparrows do not eat the leaves of the plants from half to full growth; they do, unless stopped, eat the entire crop in a few days while the plants are young.

The beet rust is a far more serious matter. Last year some very fine even beds of beet were nearly denuded of their leaves by the middle of September. During the early stages the crops were very promising, but being grown in a heavy soil and the season coming wet and cold, too, the rust appeared at an early stage and soon destroyed all except the small, central leaves. The Bordeaux mixture is the only remedy that I know of, but I have found it advisable to sow beet seeds in two quarters, if available, in a light and heavy soil, respectively, then in a very dry season the plants in the heavier loam are the best, while those in the light ground escape a bad attack of rust and yield a satisfactory crop.

## CELERY.

The celery plant would be rather difficult to grow, even if it were quite free from disease and insect attack; but it is liable to be destroyed by one or the other, unless great pains be taken to combat the enemy. Last year many crops were not harvested, and half-rotted on the ground. The plants should have been destroyed at an earlier date, but the cultivators kept on hoping and as the sticks were below the soil, heaped up for blanching purposes, the extent of the damage was not fully observed. This damage to the plants was caused by the celery fly. In my own case I had a season's battle against the pest and as I wished to exhibit celery in strong competition, I was, of course, anxious. In spite of every effort, some leaves were attacked. Usually, cultivators do not begin defensive measures soon enough. The young plants suffer even before they are planted in their summer quarters. I have observed the fly at work in May and till the middle of June. At the end of July and throughout August, it becomes busy again. Although small, the fly can be seen on the wing clearly enough. The time to watch for it is towards sunset late in July and the middle of the afternoon about mid-June; look over the rows of plants towards the sun—or from east to west. They were like swarms of bees last summer.

The fly punctures the leaf and deposits eggs in the centre; when the larvæ

hatch out they begin to feed on the juices of the leaves and soon create large blotches of tissue-like layers of leaf, which will, in due course, decay. The next stage is the pupæ, and from them new flies emerge from the soil about one month after the grubs are hatched in the leaves. The leaves should be made distasteful to the fly by syringing with an emulsion of paraffin oil and also quassia chips boiled and the liquid diluted well. Use these liquids weakly, but frequently—at least twice a week—and



**CELERY.**—*a*, Leaf-mining grub as first seen in the leaf. *b, b*, Grubs slightly magnified, destroying leaf. *c*, Pupa. *d*, Maggot greatly magnified. *e*, The fly slightly magnified.

**TOMATO.**—*f*, Black spot first showing on young fruit. *g*, Disease developing as fruit swells. *h, h, h*, Sound portions of fruit. *i*, Shows section and disease quite spoiling fruit. *j, j*, Show sleeping disease; effect on leaves.

**CARROT.**—*k, k, k*, Young carrot first affected by; *l*, Maggot of carrot fly. *m*, Maggot greatly magnified. *n, n, n*, Shows effect of maggot attack on root as latter grows.

**BEET.**—*o, o*, Shows rust on underside of leaf. *p*, Leaf-stalk decaying.

alternately. If grubs appear in the leaves, crush them between the thumb and finger. Scatter soot freely round the plants, together with a little salt to attack the pupæ and also to ward off the fly. Lime, I think, is useless. There is a tar remedy, but its application needs the care of an expert, and I do not recommend it to amateurs.

The celery leaf rust is devastating during some wet seasons. I have seen

plants freely treated with lime, but succumb rapidly. It is a fungoid disease and should be treated with the Bordeaux mixture. I believe some seed firms also treat the seeds as a preventive. Plant in a fresh quarter every year.

## CARROTS.

Wireworms and even ordinary earthworms do much damage to carrots during the later stages of their growth, but the destruction of the roots by these pests is infinitesimal in comparison with that worked by the maggot of the carrot fly. Last autumn I visited a number of exhibitions and found four out of five dishes of carrots marred by the ravages of the fly. The early spring attack is the result of autumn egg production, then, till a little after midsummer, more broods are hatched. Although soil, in itself, especially that which contains iron, does have the effect of turning the leaves of carrots reddish-brown, the carrot fly does this, too. But, whereas, in the former case the leaves retain their upright position, they droop considerably when the grub attacks the roots.

To prevent attack, the following points should be observed. In the autumn decide upon the plot for carrots and dig in half a bushel of soot to the rod. In the spring prepare the soil, sow seeds and begin the work of thinning-out, while the seedlings are tiny, finishing the work, also, at an early stage. Apply water through a rosed watering-can immediately after each thinning, to settle the soil round those retained. Then lightly pass the Dutch hoe between the rows. Carrots like a light rooting medium and in such the maggots can work most easily.

The carrot fly is small, dark brown to black in colour, with lighter wings, which when they are shining, enable the fly to be detected. These insects can be seen with the celery fly on a warm, quiet evening. The crop must be made distasteful to the fly by syringing with quassia extract or petroleum emulsion directly, in a very fine spray, over the carrots, and by syringing paths, banks and any other vacant spaces near the bed, twice a week with a strong petroleum mixture. The oil may be mixed with sand in a pure state and so sprinkled on paths and around the beds. The fly will keep at a good distance away from the quarter where there is a strong smell of paraffin and sand helps to retain it.

## TOMATOES.

White or snow fly is a pest that, in some years, has almost ruined huge houses of plants and caused much anxiety to the owners who depended, to a great extent, on the crops for their living. In the smallest house, however, the fly appears, and if not subdued, at least, will spoil the crop. I know one cultivator, who, some years ago, had to wash all the fruits before sending them to market. Now, happily, owing to various remedies, as advertised in *THE GARDEN*, the fly can be conquered. It is to such remedies that I advise



cultivators to look and not to depend upon washes that are home-made and often worse than useless. When, at the end of the season, the plants are cleared out, the whole of the surface soil should be watered with a strong emulsion of paraffin oil. At all seasons of the year keep down seedlings of the common buttercup, and beware of lettuce, cucumber and vegetable marrow plants, which also seem to attract the fly. But next to the tomato itself, I have found the schizanthus the most attractive. As the eggs hatch continually while there are live flies in the house, the remedies should be applied twice weekly till all are exterminated.

Potato plants are subject to the potato disease (*Phytophthora infestans*), and the remedy in this case or the preventive, which should be the chief aim, is spraying with Bordeaux mixture.

Black Spot is caused by a too close, moist atmosphere, through lack of ventilation and undue crowding of the plants. The young fruits will set and swell

normally, but the half-grown fruits are affected at the flower end, the skin or rind suddenly depresses, turns brown and then quite black. Such fruits should be gathered and burned forthwith, and, if there is undue crowding of the foliage, a few basal leaves should be shortened and extra ventilation given for a week or ten days. It seems to be a disease emanating from general mismanagement and not from soil mediums, though a constantly sodden state of the soil would aggravate matters.

Sleeping Disease (*Fusarium lycopersici*), so called because the appearance of the affected leaves suggests sleep; they droop as if suffering from lack of moisture at the roots. The trouble begins in the soil, first affecting the roots, then the stem, destroying tissue and sap vessels. Usually, on its first appearance, odd plants only are affected, but if precautions are not taken, whole crops succumb in following years. Every year fresh soil should be used, and with it old mortar rubble or a free sprinkling

of dry lime, wood ashes and, later, soot. Of course, any diseased plants found should be burned forthwith.

Leaf Rust is common and present with us, more or less, every year. It can be prevented by judicious planting, watering and ventilation. The brown, pepper-like patches under the leaves are due to a fungus growth, which a close, moist atmosphere favours, especially when the roots are in a wet soil—one too close and moisture-holding. The way to prevent the disease, then, is obvious, and its remedy when first observed is an application of Bordeaux mixture. It is beneficial, on hot days, when these alternate with dull, damp ones, to disperse flowers of sulphur gently among the plants. If an instrument for this purpose is wanting, take a small square of glass, place a pinch of sulphur on it, hold well above the plants and then suddenly blow it off the glass. Use more sulphur and repeat till all the house space has been so treated. This is an excellent method of counteracting this disease. G.

## NOTES FROM CONTRIBUTORS

### DAPHNE BLAGAYANA.

THE genus *daphne* contains several interesting and useful members, suitable for the rock garden, and no doubt everyone desires to possess as fine a specimen as possible of the plant illustrated. The photograph was taken at Castleford, Chepstow, the residence of Mr. W. R. Lysaght, where *D. Blagayana* succeeds fairly well, and *D. Cneorum* is represented by several large clumps.

The plant is growing between two rocks, in a mixture of peat and leaf-mould, and the position is slightly shaded from strong sun-light. The flowers are creamy-white, fragrant and usually appear in March and April. It is a dwarf evergreen shrub, with a spreading habit, and it appears to require pegging down directly any shoots are long enough for that purpose. Roots are eventually formed, and so the plant renews its energy, a condition which is essential to keep it healthy. A few small stones placed in the soil is an advantage, and during a spell of dry weather (which occasionally happens just as the plants are completing their season's growth), the roots are soaked with rain-water. We have rooted it from cuttings, these being taken in August and placed in a cold frame. During the autumn and winter a callus was formed, and when potted off in the spring and placed in a cool greenhouse, a large percentage made roots. *D. Blagayana* is a native of the mountains of eastern Europe, being discovered by Count Blagay in 1837, and introduced about 1875.—T. W. B.



AN EXCELLENT ROCK GARDEN SHRUB, *DAPHNE BLAGAYANA*.

that all wish to appear above ground is suspended for a year. Not that there is nothing doing in the corm itself. It is busy enough down below forming a new one on the top of the old in a similar manner to gladioli and crocuses. Another point to remember is that the coloured varieties are not so easy to force as the old whites. It may be that growers will find out that all varieties are not the same in this respect, e.g., among my yellows there is a considerable difference. Cowslip comes in nearly a couple of weeks before Flame when grown side by side under identically the same conditions. The cultural directions printed in catalogues do not differentiate between the requirements of the white and the coloured. On turning out my corms this summer I have been greatly

struck with the difference between those grown in light soil in which there is plenty of leaf-mould and that containing less. I think the leaf-mould helps to conserve moisture, which is all important.—JOSEPH JACOB.

### FAILURE OF GYPSOPHILA

A FEW weeks ago one noticed how, in many quarters, clumps of *Gypsophila paniculata*, established some years, and which, up to within a few days of the buds appearing, were full of promise, suddenly fail and die off. To those who have not met with a like experience, these collapses are somewhat inexplicable. Naturally, one would imagine—if the weather be at all dry—that it is lack of water at the roots, or that they are attacked with some insect pest. In nine cases out of ten it is neither one nor the other, but is due to one simple cause: a deficiency of lime in the soil. Usually these failures are met with in places where it is known that lime does not enter into the constituents of the soil, and sooner or later, the inevitable must happen. It appears strange to those who grow the perennial forms of *gypsophila* that the breakdown mostly occurs when plants are about to flower, but it is easy

to understand that these lime lovers, missing the very element so necessary to their existence, should fail. The only remedy is to supply the deficiency, and a good dressing of superphosphate or mortar rubble, whilst it will not revive the drooping shoots, will at least do much to prevent further failures. It is essential that old plants in soil where little or no lime is found, should have forked in about the roots, lime in some form. This, I find, is best done in spring.—W. LINDERS LEA.

### TORCH LILIES.

THROUGHOUT our countryside there are certain familiar wildings that, in their flowering season, add bold colours to the landscape. Such are the kingcups that



set the marshes aflame; and the gorse upon the common, when touched with flowers at every point, shines like burnished gold; or a breadth of red poppies in a field of corn under the noonday sun. So, too, there are flowers in our gardens that, in the zenith of their beauty, strike a distinctive note. Among them are kniphofias, or tritomas, known also under other designations as flame-flowers, red-hot poker and, what to me seems most appropriate, torch lilies. One recognises that when they commence to bloom—though some do so a little earlier than others—autumn days are close at hand, and the opening of their fiery spikes is contemporary with misty mornings that bring a cold nip in the air.

Torch lilies indicate that the final stage of garden beauty is near, and they light the way with glowing colour. We know them as hardy plants that, once established, do not call for much interference; indeed, the less they are disturbed the better. But are they quite as hardy as we assume, and have not many been surprised after a winter when snow has lain long on the ground to find, when examining them in spring, that decay has set in? Years ago I had an experience of this sort, and afterwards took the precaution to tie up the reed-like growths to a stout stake, which kept snow and a deal of wet from the crowns, until the time came when the old material could be cut away.

In thinking of these stately flowering plants, many are apt to conjure up in their minds the crimson and orange-scarlet spikes as represented by *Nelsoni*, *aloides grandiflora*, *nobilis* and *corallina*, and do not always take into account the softer colours to be found in *Goldelse* (yellow), *Lachesis* (deep yellow), *Lemon Queen* and *Aurora* (coral). These old-time plants are best seen in a garden, where their tall spikes can be admired, with an intervening space of lawn, or on the fringe of a border, having as a fitting setting to their beauty a background of pine or other bold foliage.—CLAREMONT.

#### MESEMBRYANTHEMUM AS A CLIFF PROTECTOR.

HOLIDAY-MAKERS are often interested in the extent to which *mesembryanthemum*, particularly *M. edule*, is being employed for the protection of British cliffs. It is strange to think that this South African succulent is playing quite an important part in checking coast erosion. It has been proved that the plant will flourish on cliff faces, where it hangs down like a giant carpet and entirely checks further falls. Strong winds, salt spray and a sun-baked soil do not have the least harmful effect on the *mesembryanthemum*, which, in very unfavourable positions, will grow with a vigour that can hardly be surpassed in the vegetable world. A small shoot of the plant about the length of a finger will, in a summer, cover an area of ground 6ft. square. Whether the surface is level or nearly vertical does not seem to make the least difference, for the *mesembryanthemum* goes ahead binding the soil so that it will never move again. Often the succulent grows down to within a few feet of high water mark, and in the winter it must be soaked with salt water. *Mesembryanthemum* is not really very hardy, but on most of the English coast line, and also the western side of Scotland, it goes through the winter well. That the plant will stand a certain amount of frost is clear, for the present writer has noticed that specimens were unharmed when the thermometer fell 6° below freezing point.—L. B.

#### PRESERVING DELPHINIUMS.

AN interesting way of preserving the spikes of delphiniums is on the following lines: Cut the spikes with a liberal amount of

stalk when they are just at their best. Now place them in a vase in which there is not more than about zins. of water. The delphiniums should be kept in rather a cool room, and it is most important that they should not be in direct sunshine. No more water should be added, but before that in the vase disappears a good number of additional flowers will have expanded. Leave the spikes until they become completely dry, by which time they will have been perfectly preserved. The flowers not only retain their shape, but, in addition, lose very little of their colour. The colour is retained as long as the spikes are not placed in the sun, in which case they quickly fade and turn to a dirty grey shade. Delphiniums seem to be the only flowers that can be preserved in this manner, as attempts with other herbaceous perennials were complete failures.—S. L. BASTIN.

#### EARLY CABBAGE VARIETIES.

ELLAM'S Early Spring is a fine dwarf, compact cabbage, and the first from which we cut this year, being ten days earlier than any of the other kinds grown here. All the varieties were grown on the same border and the plants set out early in September of last year. Flower of Spring, Ellam's Early Spring and Harbinger are in general appearance about the same, e.g., height, colour and leafage, and to a certain extent the same in formation of growth and quality of earliness, yet if carefully examined points of difference may be noted, such as the outer leaves of Flower of Spring being of a lighter shade than the leaves of Ellam's Early Spring. Early York is quite a distinct type of cabbage from any of the others. The plants are big and of a loose-growing nature, while the leaves are of a blue-green colour. This variety has nothing, so far as I can see, to recommend it as a first early cabbage, as even now, in the middle of May, some of the plants have only commenced to form hearts. It should interest all who grow cabbage to know that the late Mr. Charles McIntosh mentions in his book, "The Practical Gardener," published eighty-six years ago, Early Dwarf York and Large York cabbage, two varieties still catalogued by present-day seedsmen. They have stood the trying test of time and are still to be had.—DAVID ARMSTRONG, *Midlothian*.

#### THE YELLOW SWEET PEA.

THERE is probably no horticultural novelty so eagerly anticipated or so strenuously worked for by everyone connected with plant improvement as the yellow sweet pea, and yet it seems as far away as ever. There are no doubt intense creams on the market entitled to be classified as pale yellow, but certainly there is no variety in existence having flowers of a decided buttercup yellow, the colour which haunts the dreams of the sweet pea hybridist.

A new variety may arise in one of two ways. The first is seen when, as the result of a cross, man-made or natural, existing characters are reassorted and a new combination formed. By far the larger number of the new types arise in this way. The second class of origination occurs when the plant for some reason "sports" or mutates to throw an entirely new "break." The first method is the only one available to the hybridist. He can only juggle with and recombine the characters provided by Nature. Mutation or sporting, the second path along which improvement may pass, is a peculiarity of the plant, and there is no method known for producing it. A new break of this type, however, nearly always leads to many new varieties, as the new character is worked into the existing forms by crossing. An outstanding example of this was seen when the advent and subsequent

exploitation of the Spencer type duplicated practically every variety then in existence. The peculiarly interesting point about the yellow sweet pea, however, is the uncertainty regarding the way in which it may arise. As is generally known, yellow flower colour, if it is to have any "substance," must be based on little solid bodies (plastids) floating free in the cell, while all the other colours are the result of fluid dyes or cell sap. Both the solid and the liquid forms of yellow are available in the sweet pea, but as yet they have not occurred either singly or together with sufficient intensity as to produce "buttercup yellow." Now, running through the plant breeder's mind is the question whether it is possible to combine the yellow cell-sap or the yellow plastids in one plant with the known factors for flower colour intensification, so that an intensified shade of yellow may be produced, or are the intense creams at present on the market the result of this meeting and therefore the farthest we may go by means of crossing? If this latter be the true state of affairs, then horticulture can only wait until Nature provides what is not already there. With our knowledge of the sweet pea in its present state it is hard to tell if all the necessary conditions for producing the yellow have ever been satisfied, and therefore hybridists will be well advised to continue their labours and growers to continue their search. While inter specific and even inter generic crosses have always been mooted as a means of bringing yellow to the sweet pea, they can hardly be encouraged, because sterility, that spectre which haunts the too enterprising hybridist, nearly always steps in at some stage of the work. The most likely line of work seems to be inter-varietal crosses using always as one parent a variety known to carry the yellow tinge, as, for example, some of the scarlets and orange types.—ALEXANDER NELSON.

#### RUBUS ALCEÆFOLIUS.

A GOOD many brambles from the East have found a place as ornamental shrubs in our gardens. Most of them are perfectly hardy, but a few can only be grown under glass. *Rubus alceæfolius* is one of these. It is a fine huge climber, well adapted to be grown against pillars or similar places in a temperate house, where it will form a very attractive specimen within a short time. It has stout tomentose prickly stems and most beautiful, large, 5-7 lobed and lobately dentate leaves of a pleasant bright green on the slightly pubescent upper side. The back of the leaves is densely white or yellowish tomentose, especially on the younger ones, which adds greatly to their beauty. The flowers are rather large, white, and stand in short-stalked clusters in the axils of the leaves or in a terminal panicle at the top of the branches. The calyces are densely hirsute from rather long and stiff yellowish hairs, and bracts and stipules are finely split into numerous very narrow segments.

The plant succeeds well in a substantial fresh soil and in a place not too much exposed to burning sunlight. It grows and flowers freely for most of the summer until late in the fall.

*R. alceæfolius* is a native of Java and Sumatra, where it grows in forests and among bushes up to a considerable altitude. It would well deserve to be tried out of doors in gardens of a milder climate, such as in southwestern Ireland, in the Scilly Isles and along the Mediterranean. But it should be planted in a sheltered place, where dry and cold winds, or excessive sunlight cannot hurt it. Wherever it will grow successfully it will form a valuable addition to the shrubbery, both from the point of view of blossom and foliage.—ALWIN BERGER, *N.Y. State Agricultural Experiment Station, Geneva, N.Y.*



## CORRESPONDENCE

## SAXIFRAGA COTYLEDON CATERHAMENSIS.

SIR,—I have been noting the beautiful saxifrage under the above name at Chelsea, and have no doubt it is a hybrid between *S. Cotyledon* and *S. Hostii* or *S. Macnabiana*, which is itself a hybrid. Some years ago I grew a form under the name of *S. Cotyledon* which proved to be one of these hybrids. In this form, however, there was a much greater length of stem before flowering branches were reached, showing the leggy character of *S. Hostii*. The true *S. Cotyledon* has pure white flowers, with very narrow petals, four times the length of the calyx lobes. The flowering branches commence a little above the base of the stem, and continue to the apex, each branch carrying five to fifteen flowers. This form was much grown in the early eighties of last century. Single crowns were potted up in small pots, and shifted when necessary till the crown of leaves would cover a 5in. or 6in. pot. When the plants commenced to flower they were taken from the cold frames to the greenhouse or conservatory, where the stem reached 30ins. or more, and formed a perfect pyramid of flowers. The new form *S. C. caterhamensis* is more conspicuous by reason of the broad, handsomely spotted petals. Insects readily hybridise these saxifrages when brought together in gardens, independently of artificial crossing, while hybrids are frequent in the wild state.—Kew.

## PRIMULA HELODOXA.

SIR,—*Primula helodoxa* is now in splendid bloom here, and greatly admired by all who see it. A kind English lady sent it last year and I followed her directions as to treatment, and if I can get seed from its four fine trusses, I shall feel well pleased. Should this short account of it meet her eye, I would be grateful if she would kindly write to me anent its propagation. I live in fear that after its seeding time it may die. The very showery and cold spring evidently suited it very well. Now we have tropical heat.—L. HILL POE, *Riverston, Nenagh*.

## VIOLA HETEROPHYLLA.

SIR,—Two summers ago, I collected from the Cima Tombea a few plants of *Viola heterophylla*—a dainty little pansy in the cousinship of *V. cenisia*, and belonging to a section rather notorious for difficulty. My collected plants did not live more than a year; but they died all of them carrying fat capsules of seed. This seed, which was sown in autumn, in a spirit of no great optimism, germinated in two or three months, almost as readily as a pink, and left me with several nice little plants, which grew rapidly and compactly, flowering, some of them, the next year. The plant in nature was of a rambling character, with long underground roots cropping up here and there into a clump of foliage and flower; but the seedlings have not got this rambling habit, but grow into neat, compact plants. Moreover, the plants have been perfectly easy to grow, and are, at any rate in the limestone moraine in which they are planted, very free flowering. Lastly, and most important, they are definitely beautiful—a little angular pansy face of purple, with a distinct patch of darker purple round the centre and little eye-lashes of black—small, indeed, but large for the size of the plant. Is it possible that here, as in the case of many a difficult alpine, the solution of the cultural problem is to raise plants from seed, thus getting more initial vigour than can be possible with a collected piece, however carefully re-established? Could anybody give me news of seedlings raised from the three

other high-alpine pansies, *V. V. cenisia*, *valderia* and *nummulariæfolia*, which I have never met in nature or in cultivation? If raising seedlings is the best way of cultivating all these four high alpine, it may well be that we might make easy friends with four charming pansies, which have hitherto been dismissed from the mind—and from the garden—as paralytically difficult.—R. L. HOLDSWORTH, *Harrow-on-the-Hill*.

## TRILLIUM GRANDIFLORUM.

SIR,—There was some correspondence in your columns of late concerning rabbit-proof plants, and although I have learnt by experience to be chary of pronouncing any plant to be safe from these all but omnivorous rodents, I venture to recommend *Trillium grandiflorum* as practically immune from attack. Of course, when newly planted, rabbits will bite it off out of sheer cussedness; but if the plants are protected when first set out in the woods until they are well established, they are left unhurt afterwards. That is our experience here, and *trillium* looks far more charming in woodland than in a flower border. I wish I could send a photograph of this plant in the wild. Failing that, I enclose one of a patch in the flower garden which has been

of interesting hybrids between them, using also forms of *N. corbularia*. The late Sir Michael Foster produced some hybrids identical with mine. But they proved difficult to keep; some may still exist with friends to whom I gave them as rockery or alpine-house plants, but I have long since lost sight of them and of most of Mr. Wolley Dod's gifts.—G. H. ENGLEHEART, *Dinton, Salisbury*.

## CLERODENDRON UGANDENSE.

SIR,—Can any of your readers give me any information about this plant? I have seen it at the R.H.S. and also at Kew, but do not know if it has been tried out-of-doors in Cornwall or Ireland yet: it has bright blue flowers, and I thought it most attractive.—H. G. HAWKER, *Devon*.

## GARDENS OF HEALING.

SIR,—The articles on "Gardens of Healing" in *THE GARDEN* were very interesting indeed. I wonder if some of our old country remedies would interest readers. In the following recipes "tea" means 1 oz. of the dry material brewed with 1 pint of boiling water and allowed to stand an hour. Speedwell.—Tea for gout. Yarrow.—Tea for colds, to be drunk warm. One cupful for a dose.



A FINE PATCH OF TRILLIUM GRANDIFLORUM IN A FLOWER GARDEN.

established for more than thirty years and never fails to bloom profusely.—HERBERT MAXWELL, *Monreith*.

## THE MINIATURE DAFFODILS.

SIR,—Allow me to add a little information to the recent notes on some of the smaller narcissi by your correspondents Mr. E. Cahen and Mr. J. H. Watson, as my experience goes farther back than theirs. *N. triandrus calathinus* was first introduced by that distinguished scholar, botanist and gardener, my old friend the late Charles Wolley Dod. In 1884 or 1885 he obtained bulbs from the Botanic Gardens at Brest, some of which he gave to me, and I have perpetuated the plant from seed ever since. It was his custom, when visiting a relative near the foot of the French Pyrénées, to employ a collector of narcissi from the lower and higher levels. It was from him that I had the little *N. moschatus*, now, I fear, almost exterminated from its habitat in the Gavarnie district. The discovery of *N. pallidus præcox* was due to him, also of other wild narcissi now lost to cultivation. He was acquainted with the ordinary form of *N. triandrus* long before it was "found" by Mr. Peter Barr. Before 1890 I had gathered together, mostly from Mr. Wolley Dod, a considerable collection of these small forms, and raised a variety

Meadowsweet.—For children's diarrhoea, 1 oz. of leaves to 1 pint of boiling water. One wineglassful for a dose. Plantain.—Tea for diarrhoea. Leaves for stings and bites and a poultice for wounds. Ragwort.—Tea of leaves for sciatica, rheumatism and influenza. One wineglassful per dose. Woodruff.—Tea for liver complaints. Dried and stored will keep away moths. Balm.—Tea, 1 oz. of young tops to 1 pint of boiling water. Stand a quarter of an hour. Drink freely for feverish patients. Rosemary.—Tips of leaves and flowers infused and strained. Add a little borax. This prevents baldness. Camomile or poppy heads dried and used in boiling water will ease faceache if inhaled. Virgin lily.—Petals stored in wide bottle and covered with brandy will heal cuts. They will keep for years. Coltsfoot.—A handful of leaves to 1 quart of boiling water. Stand for twelve hours. Sweeten and give one cupful for coughs. Ground ivy for weak eyes. Leaves and flowers infused with boiling water. Bathe two or three times a day when cold. Watercress for eczema. Wash well, melt lard and stir in watercress until bright green. Goosegrass and nettle tea for purifying blood. Plantain, ground ivy, vervain and bean flowers in equal quantities make a healing lotion. Cowslips as tea for nerves. Violet leaves (garden)



alleviate pain and cure cancer. Greatercelandine, chelidonium or swallow-wort makes "golden ointment." Squeeze juice out of stalk, add one tablespoonful to  $\frac{1}{4}$  lb. of lard. Mix well. Vaseline for wounds and bruises. House leek for corns. Peel skin off leaf, bruise it and bind it on the corn with a strip of linen. Repeat two or three times. Mugwort seeds mixed with tobacco, 1 oz. of tobacco to  $\frac{1}{4}$  oz. of mugwort, relieves

asthma. Lime blossom for a tessicking cough. Dry and brew like tea.—H. LAMBERT.

**SAXIFRAGA OR MEGASEA LIGULATA** SIR.—The illustration of the Siberian saxifrage shown in *THE GARDEN* of July 4th is, I see, named *Saxifraga* or *Megasea crassifolia*. Unless the Kew authorities have lately refused to consider the many varieties of this saxifrage as worthy of distinct names, I beg to state

the excellent plant shown there is *not* *crassifolia*—for that species has big, cabbage-like, circular foliage and short stumpy spikes of dull pink flower which appear much later in the season. As far as I know it, the name generally given to it is *ligulata*, and it is far superior to the *crassifolia* form, which was that commonly grown in England until folk brought this from the south of France.—E. H. W.

## GARDENING OF THE MONTH

### FLOWER GARDEN.

**AMARYLLIS.**—Plant now in holes 6ins. deep. **ANNUALS.**—Sow now on warm dry border, *eschscholtzia*, Shirley poppies, *clarkia*, candy-tuft, cornflowers, *nigella*, *phacelia*, etc.

**ANTIRRHINUMS.**—Sow now thinly. Prick out into well drained border or into frames.

**BULBS.**—Commence planting and preparing sites. Plant daffodils in grass and bulbs in the wild garden. Plant now *bulbocodiums*, *crocuses*, *colchicums*, *leuciums*, *Scilla sibirica*, **CARNATIONS.**—Finish layering.

**CHRYSANTHEMUMS.**—Disbud and tie up. Give artificials once a week.

**LAVENDER.**—Insert cuttings in sandy soil, and water. Cut flower spikes soon.

**LILIUM CANDIDUM.**—Plant now in clumps. Place sand at base of bulbs.

**PRIMROSES AND AQUILEGIAS.**—Transplant to permanent quarters.

**PROPAGATION.**—Take cuttings of *hydrangeas*, *salvias*, *ageratum*, *pentstemon*. Insert in sandy soil in frames. Water and shade.

**ROCK PLANTS.**—Propagate by cuttings *saxifrages*, *sempervivums*, *sedums*, etc.

**ROSES.**—Feed hybrid perpetuals with liquid manure. Insert cuttings of ramblers in sandy soil. Remove faded flower shoots of climbers. Prune ramblers after flowering, and tie in young shoots. Bud more roses.

**SEEDLINGS.**—Plant out foxgloves, *bellis-perennis*, *pansies*, *sweet william*, *Canterbury bells*, etc.

**SHRUBS.**—Clip yew hedges. Remove dead flowers. Hoe and weed shrubberies. Examine grafted trees, loosen ties. Propagate by cuttings such shrubs as *philadelphus*, *cistuses*, *helianthums*, *deutzias*, *rhus*, *tamarisk*, etc. Insert half-ripened shoots in sandy soil, cover with a hand-light, or, if available, place in propagating case with slight bottom heat.

**STOCKS.**—Plant out Brompton stocks into sheltered spot.

**SUMMER BEDDING.**—Remove fading leaves and flowers. Keep tall plants well staked and carpet plants pegged down. Propagate by cuttings zonal *pelargoniums*, ivy-leaved *geraniums*, *fuchsias*, *violas*, *pansies*, *ageratum*, *verbena*, *heliotrope*, etc.

**GENERAL.**—Weed lawns. Apply weed-killer to paths.

### HARDY FRUIT.

**BUSH FRUIT.**—Thin out excessive growths. Prune black currants, burn trees badly infected with big bud. Spray gooseberries infected by American gooseberry mildew.

**CHERRIES.**—Thin Morellos for culinary use. Net trees well. Train in young shoots. Give good supplies of water.

**FIGS.**—Feed regularly trees carrying good crops. Remove coarse growths and train in young shoots. Expose fruits to sun.

**FRUIT ROOM.**—Give a thorough cleaning. Scrub all trays and limewash the walls.

**LOGANBERRIES.**—After gathering fruit, cut out old wood. Tie up new growths.

**PEACHES AND NECTARINES.**—Take off unrequired shoots. Tie in new wood. Expose fruits to sun. Do not let the borders get dry.

**PESTS.**—Keep down woolly aphis, wasps, ants, etc. Hay-band or grease-band.

**PLUMS.**—If carrying heavy crops, support lower branches with props.

**RASPBERRIES.**—Cut out summer-fruiting canes. Tie up new canes to wires. Give slight mulch if this has not already been done.

**STRAWBERRIES.**—Make and plant new beds. Water runners after planting. Clean up old beds. Hoe and water well, and give a good dressing of fertiliser. Sever layers from parent plant if wanted for forcing. Stand pots on boards at foot of wall.

**WALL FRUITS.**—Give copious supplies of water. Net plums. Train in shoots of young trees before wood ripens.

### VEGETABLES.

**BEANS, RUNNER.**—Water and feed well. Give a light mulch of manure. Pick when young.

**BROCCOLI.**—Plant out the remainder.

**BRUSSELS SPROUTS.**—Sow a small quantity of seed now. Prick some out into nursery beds, and leave remainder untouched.

**CABBAGE, SPRING.**—Make another sowing. Water drills if ground dry. Transplant early sown seedlings.

**CARROTS.**—Thin carefully late sowings. Sow horn varieties now.

**CAULIFLOWER.**—Sow in boxes and place in a cold frame. Prick off into frames.

**CELERY.**—Remove decaying leaves and growths. Tie up with raffia. Give another earthing up after a good watering. Pick off leaves attacked by maggots, and give an occasional dusting of soot.

**ENDIVE.**—Sow now. Prick out seedlings at end of month.

**ONIONS.**—Sow now on south border. Give a dressing of wood ashes and lime before sowing. Use such varieties as *White Lisbon* or *Ailsa Craig*. Bend over tops to assist ripening. Do not store until quite dry.

**SPINACH AND TURNIPS.**—Sow now for winter supplies. Thin soon.

**SPINACH BEET.**—Give soaking of liquid manure. Make a final sowing.

**TOMATOES.**—Do not over-feed or water those outside. Gather fruit before quite ripe, finish ripening on greenhouse shelf.

**VEGETABLE MARROWS.**—Thin out weak shoots, water well and feed occasionally.

**WINTER GREENS.**—Continue to plant out as the ground becomes vacant.

### FLOWERS UNDER GLASS.

**BEDDING PLANTS.**—Take cuttings. Insert in sandy soil in boxes and stand outside in cold frame. Sow *Centaurea candidissima* in boxes. Place in frames, pot when large enough.

**BULBS.**—Pot up early batches of *Roman hyacinths*, *Paper White Narcissi* and prepared *Dutch hyacinths*. Plunge in ashes outside. Pot up *crocus* species, *lachenalias* and *freesias* in 6in. pots, and keep in cool quarters in frames; plunge up to rims in fibre. Pot *Lilium candidum* in limy compost, and plunge in ashes up to rim of pots at foot of a wall.

**CACTI AND SUCCULENTS.**—Propagate now. **CALANTHES.**—Feed well when showing flower. After flowering decrease the supplies of water.

**CALCEOLARIAS, HERBACEOUS.**—Pot into 3in. pots at end of month.

**CAMPANULAS.**—Pot in 8in. pots those required for greenhouse decoration and stand outside.

**CARNATIONS.**—Pot up rooted layers of *mal-maisons* and return to frames. Pot layers of border carnations.

**CHRYSANTHEMUMS.**—Give light top-dressing when roots appear on surface. Continue tying and disbudding. Feed at intervals. Guard against earwigs.

**CLARKIA ELEGANS AND SCHIZANTHUS.**—Sow in pans.

**CINERARIAS.**—Pot on. Destroy leaf-mining maggot and spray infected plants with quassia extract.

**COLEUS.**—Take cuttings of ornamental varieties.

**CYCLAMEN.**—Feed with guano or soot water. Sow seed thinly in pans, using a fairly light compost. Shade until germinated. Prick off into pans, and put in house of moderate temperature.

**FUCHSIAS.**—Partly shorten back stock plants. Start into growth in warm house. Take cuttings of young growth.

**GREENHOUSE HEATHS.**—Propagate by cuttings. Insert in well drained pots containing sandy peat. Select small half-ripened shoots. Stand under bell-glass in cool house.

**HELIOTROPE.**—Pot rooted cuttings into 3in. pots.

**NERINES.**—Give resting period in frames. When growth commences, water and repot, using compost of rich medium loam, a little sand and mortar rubble.

**PRIMULAS.**—Feed. Pot on *P. obconica* in 6in. pots, keep cool and shaded.

**STOCKS, WINTER-FLOWERING.**—Pot into 5in. pots and pinch points fourteen days after.

**ZONAL PELARGONIUMS.**—Pinch off flower spike until end of month. Feed with Clay's. Propagate by cuttings taken from summer-flowering plants.

### FRUIT AND VEGETABLES UNDER GLASS.

**APRICOTS.**—Tie in young shoots. Allow wood to ripen when fruit is gathered.

**FIGS.**—Stand pot figs outside in sunny position to ripen. Maintain a buoyant atmosphere in house where trees are still carrying fruit.

**MELONS.**—Ventilate more freely when fruit is ripening. Discontinue damping. Remove useless growth gradually.

**ORCHARD HOUSE FRUIT.**—Place trees outside when fruit is gathered. Do not let roots get dry. Plunge pots up to rims in ashes, and water frequently, and give a light mulch of decayed manure.

**PEACHES AND NECTARINES.**—Syringe forcibly to keep down red spider directly fruit has been gathered. Do not let roots suffer from lack of water.

**VINES.**—Give muscats a drier atmosphere when ripening. Leave top air on at night. Exclude wasps by covering ventilators with tiffany. Half-prune early vines and spray to keep down red spider. Place a layer of clean straw over borders in late vinery to conserve moisture. Plunge pot vines outside.

**CUCUMBERS.**—Keep temperature warm and moist. Apply liquid manure frequently.

**TOMATOES.**—Top-dress, if this has not already been done. Re-pot June-sown plants and keep them growing sturdily near the glass. Fumigate at once if white fly is seen.



# SIMPLE GARDENING

## WHY SOME GARDENERS FAIL WITH PLANTS.

**G**ARDENERS are greedy as well as generous. They are, as a class, exceptionally generous; if they succeed well with certain plants, and a neighbour or visiting friend does not possess these particular plants, few things give more pleasure than that of a presentation of some of the stock to someone else. They are also greedy in another way, in that they wish to grow many plants—too many for the accommodation afforded—and the results are disappointment, chiefly to themselves. This kind of greediness is, really, excusable, as one is so often tempted to grow one hundred plants when there is only room for fifty. Of course, there are isolated cases where an expert cultivator can crowd in many plants in a greenhouse or stove and do them all really well. I know one such cultivator; he was, thirty years ago, an expert cultivator growing stove and greenhouse subjects splendidly, and one wondered how he managed to do so, owing to their size and health, the structures being so small in proportion. I also know a gardener who always resists this temptation, and grows just the right number of plants to fill the given spaces, and so grows very fine specimens. The two are, almost, exceptional cases. It is, really, good policy, especially during the winter months, to avoid undue crowding of the main subjects in greenhouses and conservatories, and this is a good time to make the necessary arrangements, doing the best plants well and discarding the rest.

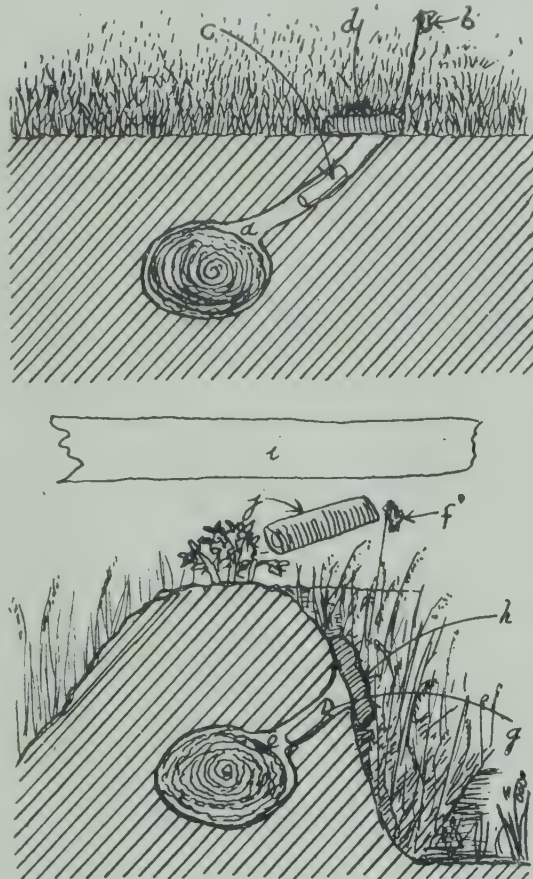
## EARLY TRENCHING OF VACANT GROUND.

Even sandy ground is all the better for being trenched at least once in three years, and that of a heavy retentive nature, such as clayey mediums, is certainly much improved. Very light soils may be dealt with in this respect, any time during the winter, with good results; but stiff soils cannot be so treated and turn out satisfactory if they are dug or trenched while in a saturated condition. The only way to deal with such ground is to ridge it, throwing up the soil in rough chunks to form ridges about 2ft. across at the base and 18ins. high. Ordinarily severe weather will then penetrate such ridges, and, in the spring, the soil, when levelled, will crumble to pieces—almost a powder—and it will be a pleasure to work it; the resultant crops, whether from seeds or plants, will thrive in it during the following summer. It does not matter how rough the plot may look when the work of trenching or ridging is done; but it would be a big mistake to meddle with such trenched or ridged soil while it was, later on, in a pasty condition. If left undisturbed, the soil will dry sooner than if it was forked up prematurely. I may urge similar treatment for new ground, ground now all weeds and rubbish or good grass. As soon as possible, the turf of such ground should be peeled off and stacked for future use, and the

soil trenched. The weedy ground should be top-cleaned and the rubbish burned out at first. So we see how important it is that vacant ground should be cropped or trenched from now onwards.

## WASPS AND THEIR DESTRUCTION.

Owing to the wet weather last winter and in the early spring many queen wasps were destroyed. In some districts, especially where hay and corn ricks were numerous and thatched cottages and outbuildings exist, there was ample shelter from cold and wet, and so queen wasps survived. Although fruit crops are good in many districts, we do not appreciate their destruction by hordes of wasps, rather we would destroy the latter. The netting of choice plums,



pears, apples and peaches is essential in some parts even where the nests are destroyed wholesale. The nests are dealt with in various ways, by damp and dry powder squibs, etc., but I am explaining the simplest way. The nests should be located during the daytime. Watch the wasps leaving the fruit quarters as far as you can see them, then go to that point and watch them passing a further stage, and so on to the nest; then fix a stick with a white paper on it close to the nest. The nest should be destroyed soon after sunset, when the wasps are at home. This is easily done by inserting a small roll of cloth, the size of one's finger, in the entrance hole and stopping the latter with turves and fine soil trodden down. The cloth should be saturated with turpentine. The method is shown in level ground and in banks. At *a* the nest is shown; *b*, the mark stick; *c*, the roll of saturated cloth; *d*, the stopping-up soil. In a bank *e* shows the nest; *f*, the mark stick; *g*, the saturated cloth; *h*, the stopping-up

soil; *i*, the strip of cloth; *j*, the latter rolled up ready for dipping in a vessel of turpentine.

## TOMATOES: LATE SUMMER AND AUTUMN TREATMENT.

To reap the best from every plant grown and fruited throughout the summer months, we should judiciously reduce the amount of foliage and stop the plants in due time. After many years' experience I have found it advisable to stop plants growing in the open air at the end of July, and about August 15th in the case of those growing under glass. On or about these dates, respectively, I pinch off the ends of the plants just beyond the truss of flowers last formed. This truss of flowers should be well shaken during the three days following. This treatment helps to distribute the pollen and set the fruits, which quickly swell and attain a large size. The leaves, also, grow rapidly; some of the lower leaves should be reduced in size if they are turning yellow or cause overcrowding. If the plants are allowed to continue making new growth, both the growth and the young fruits borne on it will be useless and do harm, because they rob the lower fruits, which have a chance of ripening, and thus reduce the weight of the available crop. Furthermore, the removal of the tops in due time allows more air and sunshine to reach the fruits, which colour better. The latest crops are borne on young plants occupying sunny positions under glass and which are now showing the first truss of flowers. Not more than three trusses should be allowed to mature on these plants.

## GRAPES.

The early varieties, such as Black Hamburg, Foster's Seedling and Buckland Sweetwater, will be colouring nicely, and the late ones hardening the stones in the berries. Where all are grown in the same vinery, it is difficult to treat all as they should be; but usually they are grown in separate houses. Now, black grapes "finish" better under a slight shade than when unduly exposed to the sun's rays; whereas the white grapes put on that rich amber colour better when they are exposed, after the stones have hardened. All varieties are liable to be badly scalded if they are exposed to the sun unduly while the stones in the berries are hardening, and the Muscats are the ones to suffer most in this respect. Approximately, the stoning process occupies eighteen days in the case of early varieties, and twenty-two in that of late ones. The berries are hard to the touch, but soft after the stones in them have hardened. The final stage of feeding should come now and end when the colour is perfect. Night air, in moderation and according to the weather conditions, is beneficial; more air, generally, should be the rule, especially through the front ventilators; but the latter should be almost closed at sunset. All sub-lateral shoots should be removed weekly.

GEORGE GARNER.



## IPSWICH FLORAL FETE

CONSIDERING the prolonged drought that has been experienced in this district, and the heat wave that occurred before and during the Show, it was a matter of congratulation that the exhibits were so good as those shown at Christchurch Park on Wednesday, July 15th. For a droughty season the exhibits in practically all classes were exceptionally fine. Pride of place and attention in the floral exhibits were accorded to roses, which were very good. Especially attractive was the large group of cut roses erected by E. J. Hicks of Hurst, Berks, and granted the silver challenge vase. Closely following in point of excellence were the exhibits of F. Cant and Co., and B. R. Cant and Sons, and Messrs. Allen, in whose group the dwarf polyantha Orange King was prominent. In the open classes for cut roses (thirty-six blooms), Messrs. F. Cant were first, B. R. Cant second and D. Prior third. The first-placed exhibit won the silver challenge bowl, and in the second prize lot was the premier individual bloom of the Show—J. G. Glassford. The amateur classes were fairly well filled and some good blooms staged.

Sweet peas were another striking attraction. Messrs. J. K. King put up a representative group of good varieties, prominent among which was Royal Scot. It secured for them the silver trophy. In the vase classes there were some exceptionally good displays, the first prize exhibit for nine vases being quite striking. This was staged by A. E. Garrod, the other prize-winners being Dr. Turnbull and Sir G. Ryan. Space will not permit of our referring to all the exhibits in this and other classes which really merit mention.

Carnations were not quite so prominent, but there were some good flowers. A fine display secured for H. Lakeman a silver bowl, and he was also successful in other classes in the open section. There were some good vases of hardy flowers, but in these classes competition was not so strong, the hot weather obviously being against the showing of these flowers.

Considerable space was given to floral decorations, and these were a feature of the Show which was, evidently greatly appreciated by the visitors. There were some distinctly artistically decorated dinner-tables, the work of the judges being by no means easy. Bowls and baskets of flowers were also a striking feature.

In the classes for grapes, white and black, Mrs. Jump and F. S. Stevenson were first and second in each case. Mrs. Jump also staged some fine nectarines and peaches, meriting the first award. Small fruits were fairly well represented. Although one could realise the ill effects of the drought by the number of the exhibits, there were some fine vegetables, especially of potatoes, peas and vegetable collections. In the main collection the prizes were awarded in the following order: J. Cobbold, Major Vivian, W. Reavall.

Taken as a whole, and in view of the adverse season, it was a Show of which Ipswich might well be proud, and reflected great credit on those responsible for the arrangements.

## BOOK REVIEW

FROM America we have just received a volume which will probably, in years to come, rank as a classical contribution to the already long list of horticultural works. It is the story of a garden—a great garden, which already, after fifty years of its life, ranks as the finest institution of its kind

in the world—and it is called by a most unpretentious title, "America's Greatest Garden," by Ernest H. Wilson (published by the Stratford Company, Boston, Mass., U.S.A., price \$3.00). The author requires no introduction to readers of THE GARDEN, and our task is, therefore, all the more easy in bringing his latest and one of his best works to your notice. His record as a botanical explorer and collector is fully testified in all gardens, where trees and shrubs are grown, as almost every genus have been enriched to the extent of one or more of its members by his travels abroad. We owe the introduction of many of our finest garden shrubs to his keenness and enthusiasm, and in this volume he tells the story of how many of these are thriving in the Arnold Arboretum, of which he is the Assistant Director. As such he is ably qualified to write such a book, and his love of this great garden and collection is revealed throughout its pages. The opening chapter tells in simple language how the Arboretum originated and what it stands for. Probably no other institution has so much to its credit as this adjunct to Harvard University. All horticulturists and, more especially, American gardening enthusiasts, are deeply in its debt.

In the next four chapters, Mr. Wilson conducts the reader through the four seasons and describes the changing landscapes in words which could not be surpassed by the brush of a master artist. Four of the noteworthy floral pageants in spring are eloquently described—the cherries, whose numbers have been so largely increased by Mr. Wilson's travels in Japan; the crab apples, the lilacs, and the azaleas, which have also been greatly enriched by the author's explorations. Some of the noteworthy collections to be found in the garden are chosen to give the reader an idea of how the Arboretum is laid out. There are the oaks and hickories, the rhododendrons, hawthorns and the great conifer group. In these chapters, all the species growing in the garden are adequately treated and described in a masterly way, and the average gardener will find these not only full of interest and enjoyment, but also full of instruction. Two chapters on Climbing Plants and Border Plants are both full of valuable information and serve as a useful guide as to what genera can be profitably employed. A few pages serve to picture what a shrub garden should be, always bearing in mind, however, that the Arnold Arboretum is a public garden, and that fact has to be duly considered. The subject of food for birds is treated in another few pages and makes interesting reading; and the book concludes with a reference to the work done by the institution, from which the reader can gauge something of the labours of its well known Director, Professor Sargent, and the author himself, which have been expended on making the Arnold Arboretum what it is to-day.

The volume undoubtedly fills a niche in horticultural literature, not only on account of the story of the Arnold Arboretum, but for the large amount of useful and general information it contains, so admirably set forth in a lucid and simple yet captivating style. A word must be said about the fifty full-page illustrations, which rank as high as the text. They are fine pictures, and what the words may not clearly describe the illustrations certainly do. The book, in addition, is excellently printed throughout and free from those blemishes which often mar the publication of such a volume.

## PUBLICATIONS RECEIVED.

"Adam's Garden."—The cultivation of vegetables, tomatoes, rhubarb and small fruits. By L. E. Fox, with a prefatory note by Mr. F. J. Chittenden. (Longmans, Green and Co., Paternoster Row, E.C.4,

price 2s. 6d.) A compact and handy little manual, written in a simple and lucid style which can be thoroughly recommended to those whose gardening duties are carried out in their leisure hours.

"The Garden Register," by Marion Cran. (Herbert Jenkins, Limited, 3, York Street, S.W.1).

"Garden Receipts," sixth edition, enlarged, by Higgot Owen. (Crosby, Lockwood and Son, Ludgate Hill, E.C.4, price 2s. 6d.) This is a practical booklet for a practical man. It contains a useful collection of remedies and methods of treatment for the many diseases and pests which attack garden plants, in addition to many other helpful hints.

"In Praise of Birds," described and photographed by Charles E. Raven, D.D. (Martin Hopkinson and Co., Limited, Covent Garden, W.C.2, price 14s.) A book which all bird lovers will find both interesting and instructive. Written from the amateur's viewpoint.

"Lundy: Its History and Natural History," compiled by Lewis R. W. Lloyd. (Messrs. Longmans, Green and Co., price 12s. 6d.) An interesting account of the history, including the geological, entomological and botanical aspects, of Lundy, which will prove a valuable guide to all intending visitors to the island.

"The Lorette System of Pruning," by Louis Lorette. Translated by W. R. Dykes. (Martin Hopkinson and Co., Covent Garden, W.C.2, price 7s. 6d.)

## TRADE NOTE

### A NEW FLOWER PRESS.

ONE of the hobbies which generally appeal to all gardeners, and many others who have a passing interest in flowers, is a means of preserving blooms of a certain flower, or, perhaps, the whole plant. There are many ways of pressing and preserving floral specimens, as botanists and collectors all know; but all these are capable of being improved. A new patent press, known as the Chelsea Flower Press, has just been sent in, and it certainly seems to provide a satisfactory means of preservation without deterioration of the specimen setting in. It consists of layers of cotton-wool placed between wire frames, over which one or two straps, depending on the size, can be affixed to keep the whole tight. The flowers are simply placed between the layers of cotton-wool, and it is advisable to put the frame out in the sun or before a fire when pressing, as the specimen dries more rapidly. The benefit of this method is that the pigment or colour of the blooms is preserved as in life, which is, in many cases, expedient or desirable. The frame is supplied in sizes from 5½ ins. by 7 ins. to 14 ins. by 12 ins., the latter size being of especial use to botanists. They can be obtained from Messrs. Philip and Tacey, Limited, 69-79, High Street, Fulham, S.W.6.

## CATALOGUES RECEIVED.

Mr. T. Smith, Daisy Hill Nursery, Newry.—Hardy Bulbs, etc.

Messrs. Stuart and Co., 13, South St. Andrew Street, Edinburgh.—A well illustrated and useful list for all gardeners who wish for a good show next spring.

### FOREIGN.

Messrs. Walter Blom and Son, Hillegom, Holland.—A useful list.

Messrs. C. G. Van Tubergen, jun., Haarlem, Holland.—A valuable and well illustrated catalogue, containing numerous varieties of all classes of bulbs.

Messrs. Anthony C. Van der Schoot, Limited, Hillegom, Holland.—Bulb Lists, including tulips, hyacinths, daffodils, etc., profusely illustrated.



# THE GARDEN.

## WATERER'S FOR THE BEST IN BULBS

Forcing, Bedding, Naturalising, etc. Autumn-flowering Tulips and Colchicums. Our new illustrated catalogue is now Post free.

WATERER'S ALPINE AND PERENNIAL PLANTS, including all the best in Lupins.

WATERER'S GOLD MEDAL RHODODENDRONS, Azaleas, hardy Shrubs, Yews, Conifers, etc.

WATERER'S NEW ROSE AND FRUIT TREE Catalogue, including all those varieties really worth growing.

descriptive and illustrated catalogues ready shortly.—WATERER, SONS AND CRISP, LIMITED, Twyford (Berks), (Surrey), and London.

## KEALEY'S PATENTED HOP MANURE.

The original and only substitute for Stable Manure. See art. on back cover.

## M. DUNCAN TUCKER & SONS, LTD.,

Pennington Road, South Tottenham, N.15.—Conservatories, Glass Houses, Vineries, Peach Houses, Portable Buildings, etc.

## ROSEBATHS, GARDEN VASES, SUN-

SHEDS, NESTING BOXES. Catalogue (No. 4) free.—ROSEBATH, 60, Buckingham Palace Road, S.W.

## BUY THE BIRDS.—Rotless Tanned

NETTING. Small Mesh. As supplied by us to the Royal Horticultural Society. In two qualities. 50yds. by 1yd., 4/-, 6/9; 2yds., 3/6; 3yds., 12/-, 20/3; 4yds., 16/-, 27/-; 25yds. by 8yds., 27/- Any size supplied. Carriage paid; approval. per qualities, 3/6 50 yds., measured mesh closed.

## RE NETTING.—From 2/10 per 50yd. roll.

Best House in the Kingdom. Write us for prices. Thousands of rolls stocked. Raffia, 7d. lb., postage extra.

## RDEN HOSE.—1in. by 1-ply., 60ft., 17/6.

Age Paid. All sizes supplied.

## NNIS BOUNDARY NETTING.—Lines top

bottom, 25yds. by 2yds., 16/3; 3yds., 18/3; 4yds., 25/3. Age paid; approval. Standards for fixing to, also playing poles and all requisites supplied.

## WN MOWERS.—Sale, 5 Riveted Blades,

wheels, brass bushings, close cutting, highly finished, unequalled value, 8in., 20/9; 10in., 22/6; 12in., 25/-. Approval.

## NTS.—Army Bell, All Complete, New

Flags, Deep Walls from 55/-. Scout Tents, 24.6. Garden, and all kinds of Tents and Marquees supplied.

## MBOO CANES.—3ft., 7d. per doz.; 4/-

00, postage 9d. Quantities cheaper. Deck Chairs, 3/9.—HAWTHORN, LIMITED, Dept. E., Shrewsbury.

## NCING.—Chestnut Pale Fencing and

Screening. Illustrated Catalogue on request.—THE KEY UNDERWOOD CO., LIMITED, 48, Shottermill, Haslemere, Surrey.

## RE AND CHOICE DAFFODILS.—Our

of fine New Seedlings, cultivated on our disease-free ground, now ready, and will be sent, post free, to applicants.—BERT CHAPMAN, LIMITED, Rotherside Gardens, Rye, Sussex.

## NADIAN AND AMERICAN GLADIOLI.—

Best of the standard varieties and novelties.—J. W. CROW, Toronto, Ontario, Canada.

## CKERY, well weathered water worn,

richly coloured, Cheddar Gorge Rockery Stone, any size or quantity; also dry wall stone for sale. Inspection and. HIGHNAM, Rockery Depot, Wells.

## LL AND WATER GARDENS. With

plans on rock gardens, heath gardens, and paved water gardens. By GERTRUDE JEKYLL. 7th edition, revised. 17s. 6d. by post, 18s. 4d.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## BARR'S AUTUMN-FLOWERING BULBS.—

COLCHICUMS, CROCUS SPECIES, NERINES, WHITE ROMAN and EXTRA EARLY LARGE FLOWERED HYACINTHS, etc. List on application.—BARR & SONS, King Street, Covent Garden, London, W.C.2.

## IRON AND WIRE FENCING FOR GAR-

DENS.—Ornamental Iron and Wire work of every description. Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70. Ask for separate lists.—BOULTON AND PAUL, LIMITED, Norwich.

## THE DOUGLAS CLOVES and Hardy Border

Carnations are now famous throughout the world. Glorious scent, stiff stems, perfect calyx, and perpetual habit. They flourish in the coldest parts of Britain. Extract, "The Times": "Mr. Douglas is the leading raiser of this flower. His wonderful strain of new cloves is superb, etc." Our new catalogue is now ready.—J. DOUGLAS, The Premier House for Carnations, Great Bookham.

## CONTENTS.

White Flowers in the Woodland. (Illustrated)	441
Frangrance in the Greenhouse. (Illustrated)	442
Fair Crowns.—I, Olympia and Hercules' Olive	444
The Lace Wing Fly. (Illustrated)	444
Some Tibetan Primulas. (Illustrated)	445
Herbaceous Flowers at Vincent Square. (Illustrated)	448
Vegetables and Their Diseases. (Illustrated)	449
Book Review: The Lilies of Eastern Asia	451
Notes from Contributors	452
Lachenalia; Cistus recognitus; Figs; Some Heucheras; Cerastium alpinum lanatum; Erythraea Massoni; Increasing Hyacinth Bulbs; Mutisia decurrens.	
Simple Gardening	vi

## LOOK! TANNED GARDEN NETS.—All

orders despatched same day. 25yds. by 1yd, 2/-; 25 by 2, 4/-; 25 by 3, 6/-. All carriage paid. Any size supplied. Also Tennis Boundary Nets.—MOORE AND CO., Net Works, Rye.

## BARGAINS IN GARDEN WIRE, ETC.!!

Government paid twenty times our price. Ideal for training Peas, Tomatoes, Fruit Trees, Arches, Logans, Beans, Hops, Greenhouses, Pergolas, Chrysanthus, Tying, Fencing, etc. Steel-stranded, waterproof covered, durable. 19/6 mile (full 1,760yds.). Small lots quoted. Get free Samples and list 300 bargains. Postcard to-day!—GREEN'S GOVERNMENT STORES, 213, Albert Street, Lytham.

## THE CULTURE OF CHRYSANTHEMUMS.

By W. WELLS, 2/6 net; cloth, 3/6 net; by post 6d. extra.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## POULTRY BARGAIN, 300 month old White

or Brown Leghorns, 1/6 each, 18/- doz.; two month, 3/-, 36/-; three month, 4/-, 48/- doz. Carriage paid.—CONTI FARM, Stratford, Essex.

## CYCLAMEN—SOW NOW!—In six colours,

or mixed, 2/6 per packet; also Corms (dormant, ready to pot-up), 1/3 each or 12/- dozen, and young plants for potting-on, 9/- dozen. Our famous strains, including Salmon King, Pink Pearl and Cherry Ripe, the nearly scarlet variety.—STUART LOW AND CO., Bush Hill Park, Enfield.

## CHOICE DAFFODILS, surplus bulbs from a

large collection. Apply for list. NASH, Knoll Lodge, Burnham-on-Sea, Somerset.

## SUTTON'S CABBAGES.

The best varieties for spring cutting are:

Sutton's Harbinger .. .. . per packet, 1/- and 1/6  
Sutton's April .. .. . per packet, 1/- and 1/6  
Sutton's Flower of Spring .. .. . per packet, 1/-; oz., 1/8

"I have never grown such lovely Cabbages as I have this Spring from your Harbinger seed. Of 5,000 plants not one bolted. I can strongly recommend Harbinger as the finest Cabbage in cultivation for Autumn sowing."—Mr. J. Parkins, North Hill.

SUTTON & SONS, THE KING'S SEEDSMEN, READING.

## BEFORE ORDERING BULBS, ROSES,

Sweet Peas, etc., you should procure a copy of our Autumn Catalogue, featuring latest Novelties, ready Mid-August. Apply now.—DOBBIE AND CO., LIMITED, The Royal Seedsmen, Edinburgh.

## CHEAP GOVERNMENT WIRE !!!—Great

for training fruit trees, peas, beans, hops, arches, greenhouses, tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-stranded and waterproof covered. Several thicknesses from 19/6 per mile (full 1,760yds.). Small lots quoted. Postcard to-day for free samples and list of 300 bargains.—GREEN'S GOVERNMENT STORES, 69, Albert Street, Lytham.

## NEW ZEALAND PLANTS for Seaside

Gardens.—Pittosporum nigrescens for hedges, pot grown plants for planting now, 18/- per doz. Olearia Macrodonia, 1ft., 12/- doz., splendid for hedges. Olearia Haastii, 1ft., 12/- per doz. Brachyglottis repanda, 2/6 and 3/6 each. Clematis indivisa, 2/6 each. Ozothamnus 2/6 each. Muehlenbeckia complexa, 1/6 each.—TRESEDER AND CO., The Nurseries, Truro.

## SEWAGE DISPOSAL FOR COUNTRY

HOUSES.—No emptying of cesspools; a perfect fertiliser; no solids; no open filters; perfectly automatic; everything underground. State particulars.—WILLIAM BEATTIE, 8, Lower Grosvenor Place, Westminster.

## PRIMULA AND ALPINE SEEDS from

choice (1,500 collection). Rare Seedlings and Rockery Bulbs. Lists free.—REV. J. F. ANDERSON, Glenn Hall, Leicester.

## HOW TO HEAT YOUR HOUSE.—By Edwin

Gunn, A.R.I.B.A. Better Lighting—Cheaper Fires—Hotter Baths—Healthier Air. Just Published, 2/6 net.—Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

## JAMES BACKHOUSE, F.L.S., F.R.H.S., for

many years chairman of the late firm of James Backhouse and Son, Limited, having retired from York, offers his services as Garden Consultant. 30 years' experience, specially in connection with Alpine and Herbaceous Plants. Advice given for Rock Garden construction and planting, also for permanent Flower Borders, boundary Plantations, etc. Address for terms to CAER FEGLA, Arthog, North Wales.

## THE WELSH BULB FIELDS were awarded

the Gold Medal at the Dutch International Show last April.—A list of Daffodils, Tulips, and other Bulbs will be sent on application to the Secretary, THE WELSH BULB FIELDS, St. Asaph.

## GARDEN DESIGN is best dealt with in

"Planning and Planting of Little Gardens," by G. DILLISTONE, 6/-; by post, 6/6. Published at the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street, Covent Garden, W.C.2.

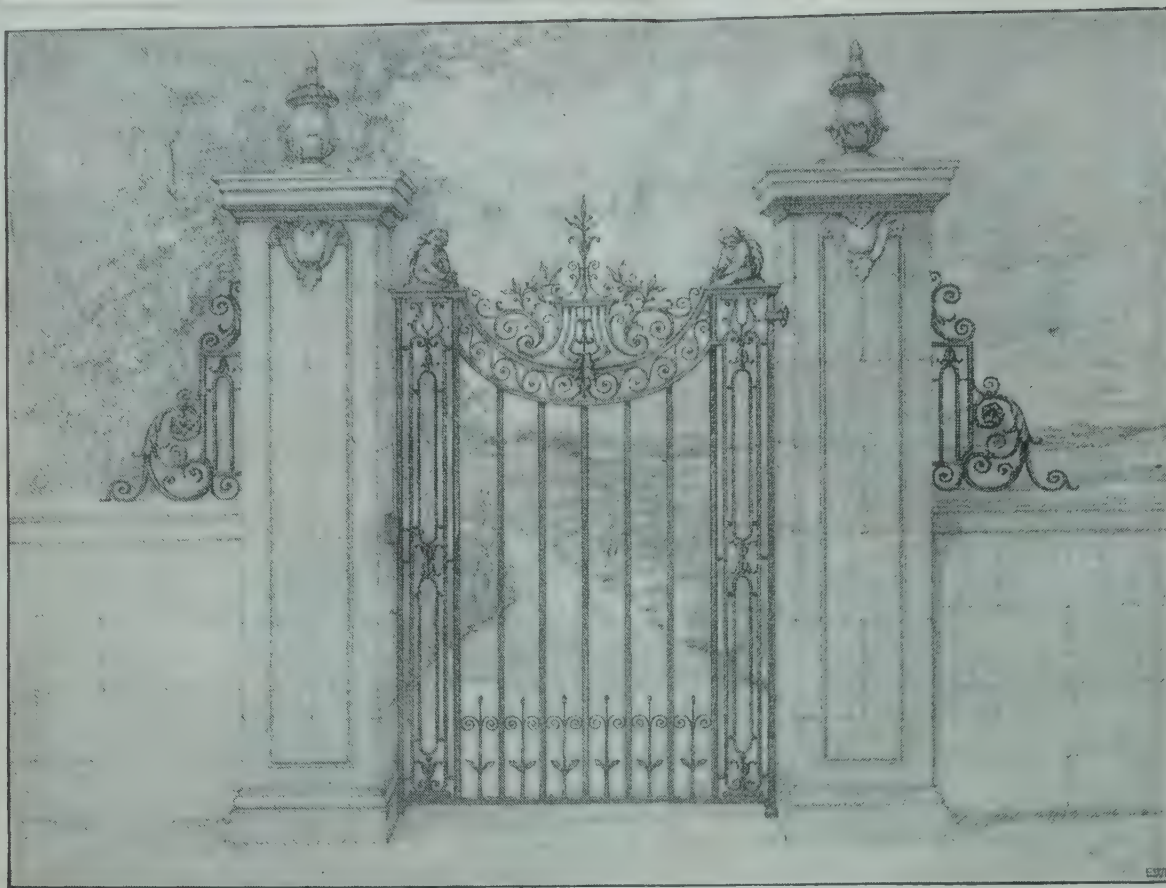
## ORCHIS FOLIOSA, splendid flowering roots

of this charming hardy border plant ready to plant in September. 2/6 each; 10 for 20/-.—MORRIS, Formakin Gardens, Bishopton, N.B.

## GREENHOUSE PAINTING AND GLAZING.

—"Vitrolite," superior to White Lead Paint, 18/6 per gallon, cans extra. "Plastine," the Imperishable Putty, 32/- per cwt., kegs extra; 7lb. tins, 4/-, pos 1 free; 14lb. tins, 5/6 each, carriage extra, tins free.—Full particulars from W. CARSON AND SONS, Grove Works, Battersea, S.W.11.





London.  
8 Victoria St. Westminster S.W.

**HILL & SMITH LTD Brierley Hill Staff's**  
Craftsmen in Metals

Manchester.  
8 Exchange St.

**SOMETHING  
NEW AND  
GOOD**

**TO BE SOWN  
- NOW -**

Cyclamen "SCARLET KING." A great acquisition. Colour of the Hollyberry; neat habit and very early blooming. THE plant for Xmas. SEEDS, 2/6 and 5/- per packet.

Cyclamen "BATH BEAUTY." A giant salmon pink, bearing enormous flowers, quite equal to our "Giant White" in size. A lovely colour with beautifully marked foliage. Habit extra good. SEEDS, 2/6 and 5/- per packet.

**OTHER GOOD SORTS**

BRILLIANT, rosy carmine. FAIRY QUEEN, frilled white. GIANT WHITE, unequalled. GIANT CRIMSON, extra fine. GRANDIFLORA, white, crimson base. MRS. BUCKSTON, frilled salmon. SALMON SCARLET. SALMON KING. - - SCENTED, white, crimson base.

All the above at 1/6 and 2/6 per packet each sort.

FINEST MIXED .. 1/6 and 2/6 per packet.

**Blackmore & Langdon, Bath**

Please mention THE GARDEN when writing.

*Notes from Maidstone.*

**A HANDBOOK OF  
FRUITS.**

By E. A. Bunyard.

The second and concluded volume of this work is now published, and contains the Stone Fruits, Cherries, Plums, Peaches, etc., and the Bush Fruits, such as Gooseberries, Currants, Strawberries, and Raspberries. May be obtained from us direct for 10/10 post free, or from any bookseller. Publisher, Mr. John Murray.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.

**SOIL PESTS  
DESTROYED**

by "ALPHOL"  
Sample 14 lb., 3/6 carr. p.

Write for particulars of this and other reliable Gardening Helps, Lawn Improvers, "Veribest" Seeds, etc.

Garden Supplies, Ltd., Cranmer St., Liverpool

**KING'S ACRE STRAWBERRIES**

New List of the Best Varieties, with helpful Cultural instructions, including all other useful Berries.

A most useful List, post free on application

**KING'S ACRE NURSERIES, Ltd., Hereford**

Please mention THE GARDEN when writing.

# BLOM for BULBS

**HYACINTHS for December and Christmas**  
.. flowering ready for despatch **NOW** ..

Apply for Catalogue to Messrs. J. C. WHITNEY & Co., Eldon Street House, Eldon Street, London E.C., or to WALTER BLOM & SON (late of Overveen), Hillegom, Holland.





VOL. LXXXIX.—No. 2803.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
*Editorial Offices:* 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2. *Offices for Advertisements:* 8-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
 Entered as Second-class Matter at the New York, N.Y., Post Office.

AUGUST 8, 1925

## WHITE FLOWERS IN THE WOODLAND

WHEN a garden adjoins woodland, or any kind of copse where the soil is cool or even damp, many will be the opportunities for beautiful wild gardening. There are so many plants suitable for such places that the difficulty will be to make a choice, for in this kind of planting, where it is desirable above all things to preserve those characters of tranquillity and mystery that are the chief charms of woodland, these may easily be destroyed, or at least disturbed, by the presence of such a number of flowering plants as would be bewildering by constant attraction of attention. It will be enough in such a space as an acre of ground if there are something like three main plantings of fairly large growths, and that even these should not all be in flower at the same time. It is just this restraint as to numbers of kinds that is so restful and enjoyable in the actual wild, whether it is the wood of primroses of April or the bluebell wood of May or the shaded hillside of foxglove of June, or the wide stretches of autumn-flowering grey-purple ling. So also it will be if, in some one acre of the woodland, we plant goodly stretches of white foxglove, and, to follow it, bold drifts of one of the tall campanulas of the alpine woods, either a good white variety of *C. persicifolia* or one of the handsome white forms of *C. latifolia*. The purple forms of either are also good, but the white are better, and it is the white to which these notes chiefly refer. Then there is the graceful native plant *Epilobium angustifolium*. The rosy colour of the natural plant is excellent on the outskirts of some wood of Scots pine, but it is the white that is the best in summer

leafing woodland. It is not quite so rampant as the type plant, just a shade more refined in growth and whole aspect. It is also a valuable plant to have in the reserve garden to cut for the house.

Wide grass paths, anything from 7ft. to 12ft. in width, pass through the wood; sometimes straight, leading up to a fine tree from which other such paths radiate, while others,

again, move in easy, sweeping lines, so that a certain length only is visible, and a slight turn displays a different picture. It is in relation to these especially that the groups of tall white flowers are planted. Along the path edges are good masses of common hardy ferns of the bolder kinds—male fern, dilated shield fern, and, in the moister places, lady fern, royal fern (*osmunda*) and other free-growing genera with an undergrowth of water forget-me-not. There is no end to the delightful inventions that may be made in such ground, to be varied or amended from year to year as conditions change and as new ideas present themselves. There is no doubt that, in time, new introductions from China and elsewhere will prove



WHITE FOXGLOVES IN WOODLAND.

themselves invaluable for woodland treatment, where they may prove to be more at home than in the garden.

GERTRUDE JEKYLL.

### AMONG THE ARTICLES IN OUR NEXT ISSUE WILL BE:

ANDROSACES, by F. Barker.  
 LUPINS AND DELPHINIUMS, by R. W. Ascroft.  
 STRAWBERRY CULTURE, by I Hawkes.



# FRAGRANCE IN THE GREENHOUSE

UNDER glass one is always more aware of perfume than is the case in the open air. To begin with, it is more confined; it is stiller, and therefore the odour hangs longer upon the atmosphere. Indeed, without any fragrant flowers in bloom, there is always about a greenhouse or stove a perfume that rises from the soil and moist atmosphere that in itself is attractive, but how much more so when the favourite cherry pie or carnation is adding its quota to the whole. There is a special fitness about a fragrant greenhouse that seems more necessary even than in the sunlit borders, especially when one remembers that it is here that we must apply for the majority of our fragrant blooms, during winter at any rate.

As with the hardy garden, our perfumes are of two kinds: those that are given off spontaneously by the flowers themselves, and those that are only released when the plant is brushed against or its leaves bruised by pressure. The greenhouse is a far commoner adjunct than the stove, so that it may be well to deal first with the plants that may be grown here. The cherry pie, or heliotrope, mentioned above is not

floriferous plants; these are invariably the firmest, and therefore they root and grow most satisfactorily.

The lily of the valley is only a temporary occupant of the house and retarded crowns are used for forcing in winter and early spring, this being a very simple process where adequate heat can be maintained, and providing batch after batch of the delicate flowers within a very short period after potting or boxing. Spring, early February to nearly the end of April, is abundantly catered for by the Dutch hyacinths and the delicious freesias; while, by the earliest planting, it is possible to procure a few of the latter by Christmas and to forestall the hyacinths by a batch or two of their Roman brethren. A curious summer annual is *Martynia fragrans*, and this grows quickly and readily from seed when sown in March. The plants reach a height of 15 ins., with broad wrinkled leaves and large flowers, something like a *mimulus* in form, but of a curious fawn brown colour with beautifully spotted throat. These are powerfully fragrant, with a perfume that is absolutely unlike anything else in the flower world. Another plant that provides delicious fragrance is the *verbena*, and with this one may take one's choice of propagating by seeds, treated as half-hardy annuals, or where named kinds such as *Miss Willmott* are favoured, by cuttings. Both are good, but the risk of disease is minimised by raising seedlings, and the purpose of fragrance is equally well served.

Annual *daturas* give good flowers that, when in bloom, leave no uncertainty on the question of perfume, a single bloom being sufficient to scent a large house. A neat grower, worthy of special praise, among these is *D. cornucopiæ*, with large deep purple flowers; while *meteloides*, which reaches a height of 3 ft., with handsome white flowers tinged with violet, is another capital plant that is very easy to grow. A noble perennial form capable of reaching the dimensions of a small tree is *Datura Knightii*, sometimes known as *brugmansia* and angels' trumpets. This may be stood outdoors during summer and gives a splendid sub-tropical effect from May to October, for the bold leaves have a distinctly foreign look and the immense pendent white flowers, which distribute their colour far and wide, are certain to attract the attention of even the least observant of non-gardening visitors.

*Acacia armata*, with its fluffy little yellow balls and neat dark green foliage, is sure of a welcome in spring on account of the attraction of the plant itself, but when we add to this its sweet spring-like perfume, it is certain to find a permanent home with us. Beautiful shrubs, indeed, crowd upon us during these earlier months of the year, one of the most popular being the old golden *Genista fragrans* that literally smothers itself with its wee golden sprays which distribute their perfume far and wide. The charming Australian *boronias*, too, with their small shallow cup-like flowers are gaily blossoming and pervading the air with their subtle odour, making a striking and distinctive picture that adds not a little to the charm of the house. Two of the most lovely species of this are *elatior*, in rosy carmine, and *megastigma*, in maroon purple and bright yellow inside. *Daphnes indica*, *rubra* and *alba* are worth specialising and, once again, add to the array of spring-blooming shrubs. These, unlike the hardy varieties, are evergreen, and the lovely rose red or white flowers are most deliciously perfumed. For the cold house a tub of the old-fashioned myrtle cannot be surpassed, and this may spend the summer in the open air if wished, to the great advantage of the plant. Flowering in this case takes place in autumn, and where again brought under cover before the frosts, will continue to open its buds half way through the winter.



PELARGONIUM PRINCE OF ORANGE IS APTLY NAMED.

suitable for the cooler class of greenhouse; but, where a steady temperature of 55° is maintained, no plant can be found to excel it as a roof or rafter plant, for it is scarcely ever out of bloom and one may find a nice little bunch of the fragrant sprays practically throughout the year. As a standard or bush plant in the smaller houses it is equally good, though for continuous flowering there is nothing to excel an old specimen with its roots planted out in the border and allowed to run, as regards the top, more or less at will. There are, of course, many varieties of this varying in colour; while, too, some are even more fragrant than others; two that can be especially recommended being *Bouquet Perfume*, lilac blue, and *Lord Roberts* with large heads of metallic violet. Those who appreciate white flowers will find *Jean d'Arc* suit their taste exactly.

Carnations, of course, fill a large share of the winter demand, and by striking cuttings and stopping the plants at different seasons one may have these plants in flower throughout the year. Culture cannot be dealt with here, but one point may be emphasised in connection with taking the cuttings, and that is the need for taking the best. When the plants begin to branch from the base these push out from the stem, then more branches evolve above them and finally still more over these. It is the middle shoots that make the best and most



A good length of side stage might well be allotted to the scented-leaved pelargoniums, for these form a host in themselves and are ideal for culture in the cool house, where they demand no more than to be kept moderately moist and in the lightest possible position. Search will reveal an extraordinary number of these, every one of which is distinct and interesting and worth procuring. *Capitatum* has foliage scented like the petals of the rose. *Cloringda*, too, is most refreshingly perfumed, with handsome deep green leafage, added to which are the qualities of profuse production of large deep rosy cerise flowers and a very vigorous habit. *Crispum* is valuable for the citron perfume of its leaves; while another notably fragrant species is *Duchess of Devonshire*, with flowers that are very attractive—blush white heavily blotched with crimson. *Fair Ellen* is of the oak-leaved type; while *grossularioides*, with gooseberry-like leaves, is prettily variegated. *Lady Mary* is nutmeg scented, *Lady Plymouth* highly scented and charmingly variegated, *Lady Scarborough* with leaves remarkably like those of the parsley. *Little Gem*, in addition to its use in the greenhouse, has rose flowers and a neat habit that renders it very useful for edgings outside as well. *Pretty Polly* is prominent for its almond fragrance, while *Prince of Orange*—fitting name—is deliciously reminiscent of that fruit. The old *tomentosum*, with its powerful aroma of peppermint and soft downy leaves, is never likely to lack admirers, while *Shottesham Pet* reveals the fragrant odour of the filbert nut. This is a sufficiently representative collection for the ordinary house, though it might be widely extended where more are desired, for South Africa especially is very rich in many splendid species.

Writing of fragrant foliage brings to mind one of the grandest of all these plants, the lemon-scented verbena, which is really *Aloysia citriodora*. This as a great bush in a large pot is supreme for cutting purposes and one of the earliest of all plants to grow. Given the culture afforded to the fuchsia, including the reduction of water during the winter months, and the hard cutting back in spring, you will have nothing to complain of from your lemon plant. Indeed, there is only one criticism that could be levelled against it, and that is that it is rather prone to straggle; but this may be remedied by regular and continuous stopping of the young growths.

One of the most magnificent bulbs that can be grown in the cool house is unquestionably *Hymenocallis callathina*, the sea daffodil, while its delicious perfume deserves an equal meed of praise. This is a summer flower of large size and exquisite whiteness, while the charming form absolutely beggars one's descriptive powers. The virgin whiteness is absolutely untouched, save by a green line down the centre of each petal. Our old friend the cyclamen, so long valued for its beautiful flowers and winter-blooming qualities, has recently added to its other charms that of fragrant perfume. The Sheepwell strain is really fragrant and all the usual colours are included, while the habit and freedom with which the flowers are produced leave nothing to be desired. The common *eucalyptus* might not appeal to all as a fragrant subject, but the variety *citriodora* would not meet adverse criticism on this account. The crushed leaves are delightful and it is readily and speedily grown to a decorative size from seed.

Passing from the greenhouse to the stove, one still finds no lack of fragrant flowers, even the orchid house possessing its perfumed forms in the persons of *Stanhopea*, etc. Everyone knows the beautiful *Stephanotis floribunda* with its clusters of pure white waxy flowers, and it is doubtful if a better climber of moderate dimensions can be found where space is rather restricted. One scarcely needs to praise its perfume, for the scent distilled from the lovely flowers is world famous and speaks for itself. A more gorgeous and vigorous grower that is scarcely less familiar is the *Allamanda*, of which the finest species is *Hendersoni*. This blooms from every point and bears deliciously fragrant flowers,  $3\frac{1}{2}$  ins. to  $4\frac{1}{2}$  ins. in diameter, thus giving a very noble appearance when seen from beneath. Delightful for suspension in square wooden baskets or pans is the dainty *Hoya bella*, a very different plant from its better-known relative "*carnosa*." *Bella* does not climb but forms a small bush-like plant with short branches and similar shining green leaves, although these are on a greatly reduced scale. One fact in connection with its culture should be noted, the soil—which should consist of a mixture of peat and loam—must be used in a lumpy condition and not made too fine. The Amazonian lily, *Eucharis amazonica*, is one of those established favourites that is never likely to lose its popularity,



ALLAMANDA HENDERSONI IS VERY FRAGRANT.

while the beauty of its widely expanded white flowers and the unsurpassable perfume of these is in no need of comment.

H. W. CANNING-WRIGHT.



ACACIA ARMATA IS ONE OF THE MOST ATTRACTIVE OF THIS POPULAR GENUS.



## FAIR CROWNS.

"AT the Olympic Games, an olive-crown or garland; at the Isthmus, one of pine; at the Nemean, one of parsley; at the Pythian, apples from the trees sacred to Apollo; and with us, at the Panathenæa, olives from the tree of Minerva. . . . What do you smile at? You think our prizes small, I suppose?" So queries Lucian's Dialogist, Solon. Referring again to the Greek athlete and his awards, he exults: "How they will fight for their wives and children, their religion and their country [those] who, naked and unarmed, show such an ardent thirst after victory when they contend only for apples and wreaths of olive!" A similar thought seems to have alarmed the invaders under Xerxes, when Greek deserters after Thermopylæ, explained to him the Olympic Games and the fierce rivalry for the sole reward—a wreath of wild olive. "Heavens! Mardonius," cried out a Persian warrior, "against what kind of men have you brought us to fight, who contend not for wealth but for glory?"

It was quite true, the earlier costly prizes of the local festivals at Olympia, supposed to have originated as funeral contests in honour of Pelops, had been replaced by this "precious olive." This change was also adopted by the re-organisers of three other competitive gatherings, out of which developed those famous Pan-Hellenic competitions known as the Pythian, Isthmian and Nemean games. These four great and sacred meetings were, therefore, called the "Games of the Crown," to distinguish them from the lesser athletic contests where prizes of money and valuables were still offered. Simple and poor as this leafy crown might seem to be, nothing was more treasured. That youth who reckoned time by Olympiads or Pythiads, who trained for weeks under the whiplash of his instructor, and finally bound his hair with the fillets of victory and bent his modest head

## I—OLYMPIA AND HERCULES' OLIVE

to receive the leafy chaplets of olive or pine, or celery, or laurel, bestowed at Olympia, the Isthmus, Nemea or Delphi respectively, had won honours valued far beyond riches. Roman emperors longed to wear the wreaths also. One of the proudest days in Nero's grotesque life was that on which he entered Rome, clothed in purple, wearing the Olympic crown upon his head, and carrying that of Pythia in his right hand, while the rest of the thousand and odd crowns that had been awarded by the lax hands of judges in the later games were borne before him.

However, the wreaths were not really all the rewards. Not only was the lucky winner pelted with ribbons and flowers like a *prima donna* at the moment of victory, but outside of the Stadium other gifts awaited him, such as civic honours (since each delegate from a Greek State was regarded as its personal representative), and other concessions of value. Even a portrait statue might be erected in his honour. Probably, after wearing his chaplet at the evening festivities he took it home and dedicated it to his local god, hanging it up in the deity's temple; or to that god whom he thought might have helped him to victory, in the personal way that the Greeks believed possible. Each leafy spray of the verdurous crown would certainly keep green in his memory that personage or deity whom the numerous legends connected with the founding of the various games—legends which the earlier contestants probably thought were pure history.

What Olympic victor, for instance, could forget that the heroic Hercules had decreed the games? He could choose to believe the story that the hero, after cleaning the Augean stables by turning the River Alpheus through them, afterwards rested by its brink in an olive grove. There he and his companions made their rustic beds from the luxuriant foliage,

and in the friendly contests of skill in throwing weapons, wrestling and the like, had playfully crowned the winners with branchlets of the same trees, including himself, and decided to renew the sports every year. Later, Hercules marked out a grove among these olives in honour of his father Zeus. This grove was supposed to have been destroyed to make room for the great temple of Olympian Zeus, whose olive-crowned statue was a Phidian masterpiece, and the corrupted Greek name for a grove survived in that of the squared space about this temple in the heart of Olympia, known as the Altis. But some said that the grove had been planted by Hercules, who, pursuing the hind of Diana, followed her golden antlers through the country of the Hyperboreans, somewhere north of the Danube, into the ". . . wan, grey olive-woods, The fittest foliage for a dream." They said he brought some home with him to plant about the altar of his father, and to shelter the pilgrims on the "thronged and sacred lawn of Zeus," then lying scorched under the blazing sun of southern Greece.

A lone, wild olive tree standing on the Altis near the temple of Zeus was known as the "Olive of Fair Crowns," and was presumably one of the very grove marked out or planted by Hercules. Whatever its origin, one can imagine how often hopeful, if weary, youths in training glanced at this tree and dreamed of the day when that boy of pure Greek parentage, and with both parents living, should come out just before the Olympic games, and cut, with a golden sickle and much ceremony, sprays from this olive—sprays which would be woven into the fair crowns laid on the gold and ivory table to entice the eye. If his gods were favourable, why should not the purple-robed judges "cast above his eyelids, around his locks, the grey-coloured ornament of olive"?

H. INGERSOLL.

## THE LACE WING FLY

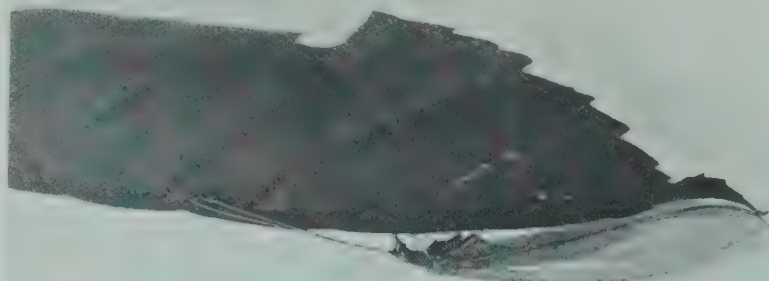
THE rearing of the lace wing fly might prove a profitable undertaking for horticulturists and gardeners generally, considering her helpful work in suppression of plant aphids. But the larva of the lady-bird is far better known in this capacity than any of the lace-wings, although the latter are numerous in Britain and are mostly aphid-devourers.

The lace-wing fly emerges in the month of May from an amazingly small white silken cocoon which has been cunningly concealed throughout the winter months under the fold of a leaf or in an equally obscured nook.

Once seen, the beauty of the lace-wings is unmistakable. All the species have slender bodies, differing slightly in size and colour: *i.e.*, tender green or brown. The wings are slightly longer than the body and richly veined, also covered with a lovely sheen which fades after death. The antennæ are long and tapering, and their eyes of a striking metallic hue. The eyes of the species named

chrysopa, for example, are like hemispheres of gold.

Early in June, the female lace-wing seeks a suitable spot for depositing the



THE ADULT INSECT.

eggs, and can often be seen at this time of the year, posing in contemplative attitude, waving her long antennæ. Her methods are both remarkable and unique.

Just before the eggs are laid, she exudes from her body a drop of gluten on to the selected spot (usually leaves or twigs infected by aphids), then, by raising her

hind body to its utmost limit, the gluten is drawn upwards as a thread, and before this has time to harden in the air an egg is lodged on the top. She repeats this action for each single egg, and, the insect's body being her gauge, these unique stems are of regulated length. When the eggs are grouped three and four together (as by some species), united at the base like a bunch of cherries, then one drop of gluten serves that group. These eggs will be very difficult to find; either in single or double rows, or in groups, placed on leaves and branches of elder or other trees and plants abounding with aphids upon which the grub will feed when hatched.

These eggs are so minute and delicate that even scientists have mistaken them for fungi, being not unlike the apple-fungus, with small oval-shaped greenish-white heads and transparent stems about three-quarters of an inch long.

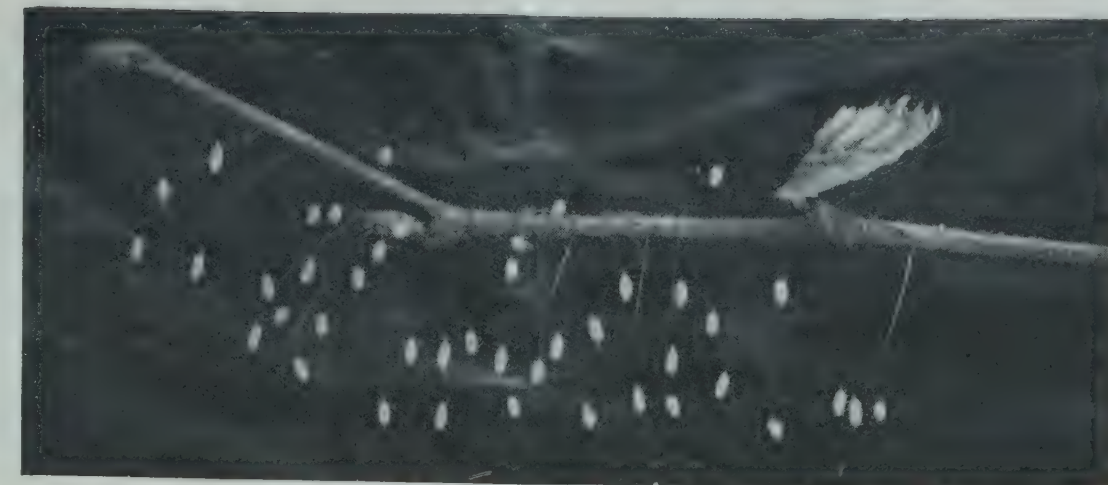
Evidently the design of these foot-stalks is to protect the eggs from the attacks of the lady-bird larvæ, etc.,



which frequent the same situations. Also the stems are too smooth and slender for the enemy grubs to climb—this has been proved by experiment. David Sharpe has given us very interesting diagrams of the specially constructed claw of the larva of the lace-wing fly, as seen under a powerful microscope.

When, after about ten days, these eggs are hatched, the grubs are no larger than pin-heads, but quickly attain full size and attack the aphids provided by the mother's foresight. One chrysopa larva was captured in Kent last summer and brought to London on August 12th. He first attracted the writer's notice by scuttling across the table on which flowers recently brought in from the garden had been lying.

In appearance, it was a phenomenal round bundle of fluffiness (the size of



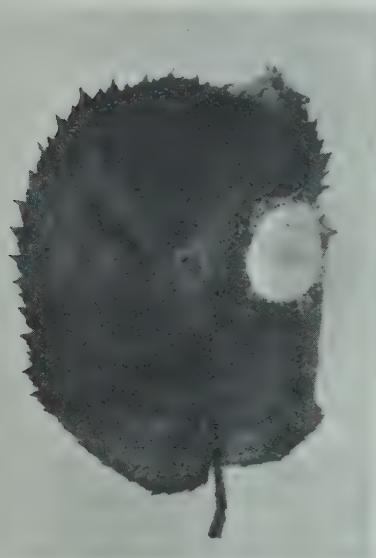
THE EGGS MAGNIFIED ABOUT THREE TIMES.

insect with six tiny legs, and the "bundle of fluff" proved to be fragments of

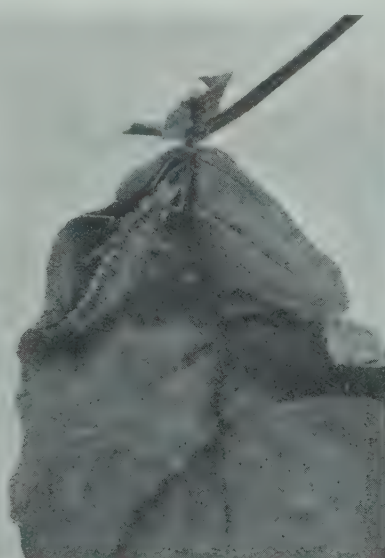
just projecting beyond this gruesome burden. The insect was kept in an empty matchbox and given occasional runs upon aphid-infected leaves when these could be obtained, and its intelligent manoeuvres were watched with intense interest: magnifying glasses were at a premium. And this is what took place.

This larva "nosed" its victims after the manner of a fox-terrier scenting rabbits, moving its head from side to side. Having found his aphid, he speared it with a special apparatus in the jaw (called a sucking-spear), sucked the morsel dry, and then, with a clever jerk of the head, flung the remains on to his back with marvellous precision, and hurried on in search of more prey. Green aphides were not easy to obtain in London, and, as the insect appeared to be pining for a more natural life, he was liberated in Kensington Gardens early in September upon some rose branches overhanging the gates of the Dutch garden.

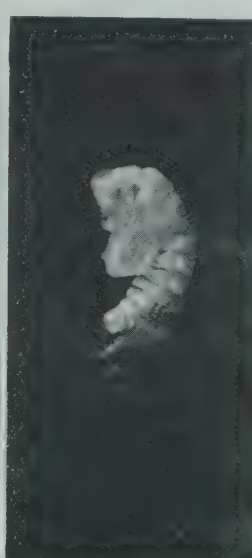
The results were satisfactory, for the larva was soon seriously engaged, actively searching under the leaves, spearing and sucking, etc., until he disappeared from view.



COCOON,



LARVA,  
OF CHRYSOPA FLAVA.



AND PUPA

a very small lady-bird), mysteriously propelled, till the magnifying glass revealed the camouflaged body of an

wings and other particles of aphides, the insect's victims; mandibles not unlike the forceps of an earwig could be seen

## SOME TIBETAN PRIMULAS

BY F. KINGDON WARD.

MR. KINGDON WARD, THE WELL KNOWN PLANT COLLECTOR, DESCRIBES THE SPECIES OF "SIKKIMENSIS" PRIMULAS FOUND BY HIM IN 1924. IT IS TO BE HOPED THAT THESE WONDERFUL PLANTS WILL SOON BECOME COMMON IN GARDENS.

EVERYBODY knows *Primula sikkimensis*, and most gardeners are acquainted with the "sikkimensis" primulas in general—a very natural group which includes also the well known *P. secundiflora*. They are easily recognised by their usually terminal umbels of drooping flowers, and by the fact that, seen in profile, the line of the corolla is continuous with that of the calyx. Botanical characters are the long narrow capsule projecting far from the calyx, and the oval or slightly coffin-shaped—but not angular—seeds, flattened on one side.

The "sikkimensis" primulas are closely related to the "candelabra" primulas, though one need never confuse them, bearing in mind the above-mentioned diagnostic marks. Both have much the same habit, sending up a single tall flower scape from a crown of large leaves; both rejoice in open meadows, more or less marshy, or along the banks of streams and the margins of woods; both tend to produce whorls of flowers—in the "candelabra" section this habit is characteristic and a good diagnostic mark, but it is by no means rare in the sikkimensis section; and finally, both are divisible into two colour groups, (i) yellow-flowered and (ii) purple-flowered.

But there the resemblance ends, and it will be seen that it is, after all, superficial. The "candelabra" capsule alone is decisive—spherical, enclosed in the calyx, instead of narrow cylindrical, projecting; the flower outline, too, is distinct, the corolla limb making an angle with the line of the calyx, and the flowers never drooping; lastly, the "candelabra" seeds are small angular cubes, like tiny lumps of sugar, and much darker in colour than "sikkimensis" seeds.

It is a well known fact that the "candelabras" hybridise freely, and consequently for garden purposes there is probably no other class of primulas to touch them. Undoubtedly they are the garden primulas of the future. Fine, sturdy, upstanding plants, they are perfectly easy to cultivate, taking care of themselves, crossing among themselves, and seeding freely. The purple-flowered PP. *japonica*, *pulverulenta*, *Beesiana* and *Burmanica*, and the yellow-flowered PP. *Smithiana*, *Cockburniana*, *Bulleyana*, *helodoxa* and *chungensis* can hardly be beaten except by their own hybrids; the flame, salmon, maroon and peach coloured crosses are as bewitching as they are bewildering, and form sheets of indescribable glowing light by the pond or along the stream bank. I have always felt that,



as a group, they have only one serious rival, the "*sikkimensis*" group. As already mentioned, these are closely allied, but easily distinguished; they also contain a purple-flowered and a yellow-flowered group.

But here comes the difference—and, from the horticultural point of view, it is an important one: no one has ever succeeded in crossing a purple-flowered "*sikkimensis*" with a yellow-flowered one, and it is not from want of trying, either. The purple cannot be broken down; it appears to be as stubborn as the yellow—the two refuse to hybridise.

I do not maintain that the "*candelabras*" hybridise in nature. They may do so, but I have never seen it, nor should I expect to do so once in a score of years. For the illegitimate seedlings, where hybrids and species are coming up side by side, are sure to be decently suppressed—in a closed formation, of course, no young plants could survive.

Moreover, the species, yellow and purple, tend to keep to their own localities and to flower at different times. This is particularly true of the "*sikkimensis*," though I have seen the yellow-flowered *P. sikkimensis* and the purple-flowered *P. secundiflora* flowering by the thousand—a sulphur sea streaked with blood.

But in the garden, where every seedling gets a fair chance, it is a different matter; here the hybrid can compete on equal terms with the species, and is, in fact, often given

represented only by two sheets in the Calcutta Herbarium, and the flowers are described as violet. No seed was collected.

In 1923 Mr. G. H. Cave of Darjeeling sent to Edinburgh seed of a "*sikkimensis*" primula collected in the neighbourhood of Gyantse. This has recently flowered at Edinburgh, and has been referred to as *P. Waltoni*; when I saw it in flower, I recognised it as closely allied to a series of coloured "*sikkimensis*" primulas collected by us in Tibet in 1924. It has the typical *sikkimensis* foliage and flower, but the corolla is a sort of crushed strawberry colour with a well defined band of cream-white meal painted over the inside, leaving only the lobes free.

These highly coloured *sikkimensis* primulas occur abundantly in the alpine meadows of Kongbo Province on both sides of the Tsangpo. There is a wide range of colour, from violet through maroon, purple and sulphur to pure white; but, whatever the ground colour, there is always the same thick layer of cream powder on the inside of the corolla, and all are fragrant.

The important point to notice is that these colours occur mixed in the same meadow, and in varying shades, though it not infrequently happens that one colour predominates in one locality, or even occurs to the exclusion of other colours. On one occasion we passed through a meadow where grew thousands of violet-flowered plants only, so that it was a simple matter to collect seed of that form, and keep it apart; it will be interesting to see whether it comes true.

Usually the colours were so mixed, however, that no attempt was made to separate them; it would have required an elaborate system of marking individual plants, and that scarcely seemed worth while, except in the case of the rarer whites, of which a few plants were marked to make certain that seed was secured. But will they come true?

Tibet, therefore, offers us, if not purple-yellow hybrids, at any rate flowers of all colours; and whether these are hybrids or not hardly matters. There should be no difficulty in making this group hybridise, certainly among themselves, possibly with pure yellows and purples, which also occur in Tibet.

We are justified, therefore, in expecting great things from these coloured "*sikkimensis*" primulas, which ought to prove just as easy in cultivation as *P. sikkimensis* itself; attractive as they undoubtedly are, they open up even more alluring possi-

bilities, and will probably share with the "*candelabras*" the honours of the future as garden plants for everyone. Nor are these the only "*sikkimensis*" primulas in Tibet. Though *P. sikkimensis* itself does not occur, it is replaced by two fine yellow-flowered species, the "*giant cowslip*" primula (*P. Florindæ*) and the "*moonlight*" primula, an exquisitely scented plant; while the purple-flowered group are further represented by the fine "*ruby*" primula. The dwarf species of the *flexilipes* type are also represented by dwarf alpine.

If we regard Tibet as the original home of these plants, there is little difficulty in understanding their present distribution, and the occurrence of identical, or almost identical, species in places so far apart, and as botanically isolated, as Sikkim and Yunnan, or even Kansu; for they would radiate out from the Tibetan plateau, east, west and south, over the mountain passes. In Tibet they are on internal lines of communication; and it is remarkable how widely these plants are distributed on the plateau itself, from Gyantse in the south to Lhasa in the north, thence eastwards down the Tsangpo valley for two hundred miles to the entrance of the great gorge.

We might even explain this "*sikkimensis*" colour complex on the facts of distribution.

In Sikkim we have *P. sikkimensis*, and in China *P. pseudo-sikkimensis* (practically the same thing) and *P. secundiflora*. These may be regarded as fixed species, sprung from the same



PRIMULA SIKKIMENSIS AT 12,000 ft. ON THE FRINGE OF MEADOWLAND ON THE TIBET BORDER.

exceptional treatment, eliminating all competition. And yet the purple-yellow "*sikkimensis*" cross has baffled the experts.

To return to our "*sikkimensis*" section, we find a Chinese and a Himalayan representation, though recent exploration has shown that these areas are by no means isolated.

The section is represented in Sikkim only by *P. sikkimensis* itself, and the late Professor Bayley Balfour stated at the Primula Conference, in 1913, that no purple-flowered species was known from the Himalaya.

Western China has given us eight or ten species, however, both yellow and purple flowered, of which we may mention *P. pseudosikkimensis*, which, in so far as it differs (if it does) from *P. sikkimensis*, is an inferior plant; *P. secundiflora*—from which *P. vittata* may differ in the herbarium, but does not do so in the field; *P. flexilipes* and *P. firmipes*, which are dwarf forms; *P. reticulata*, which is little more than an anæmic *P. sikkimensis*; *P. microdonta*; and, on paper at any rate, one or two more. So much for the known, or alleged, Himalayan and Chinese forms.

Let us now turn to Tibet. In 1904 there was collected, near Lhasa, by Mr. Walton, a member of the Tibet Mission, a primula of the *sikkimensis* type, to which Sir George Watt attached the name *P. Waltoni*, though the plant was actually described by the late Professor Bayley Balfour much later. (See Notes, R.B.G. Edinburgh, No. XLI.) The species is





THE MOONLIGHT PRIMULA ALONG WITH IRIS SPECIES.

original Tibetan stock, which consists of species in a state of flux, or incipient species. If our coloured species are something like the original stock, we may be able to pick out reds, violets and purples in a nascent state, as it were, and by crossing produce a fine range of colour, from infra-red to ultra-violet. But this does not explain why the "candelabras" cross so freely at home, for, though there are no Sikkim species, the Chinese species seem fixed enough. They scarcely reach the Himalaya proper, though the occurrence of *P. chungensis*—the only "candelabra" we found in Tibet—north and south of the Tsang-po bend, is curious; I discovered this species originally north of Likiang, 500 miles east of this point.

The following is a list of the "sikkimensis" primulas collected by us in Tibet last year:

K.W. 5746 ("Moonlight" Primula). Height 18ins., flowers sulphur, rather large, very fragrant. The first to open, in early June, lasting till the middle of August, but at its best in July. Forms sheets covering the wet pastures at 10,000–12,000ft. in a certain valley, but apparently local. There is a dwarf alpine form, probably collected under the number K.W. 5906. I am not sure whether this is a new species or not, but at any rate it is not in commerce. Seeds germinating freely.

K.W. 5781 ("Giant Cowslip" Primula). Height 3–4ft., flowers cowslip yellow, in an immense mop, about sixty to eighty, fragrant. Opens towards the end of June, continuing to flower till the end of August. Leaves very large, petiolate, resembling those of *Caltha palustris*. Grows in running streams, and forms vast colonies on steep bog slopes where the water is moving freely, always under trees. It is a true woodland plant. Quite the finest primula we found and a very distinct species, which I have described under the name *P. florindæ*.

K.W. 5818.—This is the highly coloured variable meadow plant. One packet of seed collected under this number is the violet-flowered form. The other packets contain assorted colours, collected from three different localities, and from both sides of the river. It is a plant of the open sub-alpine meadows, where the ground is not especially boggy, and is found also in the alpine region on steep grass-clad slopes, and in glades in the forest, along the side of the path, between 10,000ft. and 13,000ft. altitude. Height 15ins., flowers all colours, fragrant. From mid-June to the end of July.

K.W. 5906.—This is probably mixed seed, containing an alpine form of the "Moonlight" Primula (5746) and a distinct species, of which there are herbarium specimens numbered 5906. Seed was collected from three localities. Dwarfs with bright yellow fragrant flowers, found on very steep alpine gravel slopes, among dwarf *lonicera*, *rhododendron*, etc.

K.W. 6094 ("Ruby" Primula).—Plant of 18ins., with flowers of a wonderful deep glossy port wine or ruby red, and unusually large. Found at 13,000–14,000ft. in high alpine meadows, and bordering small streams, among stones. Seed of this species was not collected till January 3rd, by which time most of the capsules were empty. Nevertheless, it has germinated freely. Flowers in August.

K.W. 6117.—This is a 2ft. plant closely resembling, if not identical with, No. 5818, but in white and yellow tones only. It is, however, remarkable in one respect, it normally produces three, and not infrequently four, whorls of flowers, like a "candelabra." It will be recalled that this is a good diagnostic mark of the "candelabra" section. But in *P. Cockburniana* there is a tendency to suppression of whorls, only two, or sometimes three, being produced (at least, in this country), as against six or seven in such species as *P. helodoxa* or *P. Burmanica*. And now we have a true "sikkimensis" not content with the two whorls as in *P. vittata*, but launching out into three or four, like a "candelabra." It is difficult to escape the conviction that the "sikkimensis" and "candelabra" primulas are descended from a common ancestor.

I might here refer to the two purple-flowered "sikkimensis" primulas, *P. vittata* and *P. secundiflora*. The late Professor Bayley Balfour distinguished them by their foliage, describing those of *P. secundiflora* as oblong elliptic, horizontal in a rosette, those of *P. vittata* as elongated erect. This was at the Primula Conference in 1913. The late Reginald Farrer, commenting on this, pertinently remarked that the Professor's own photographs rather reversed this!

Comparing them in a garden recently, I noticed that the flowers of *P. secundiflora* usually droop all to one side, while those of *P. vittata* hang all round the stem, and are nearly always in two whorls. But there is nothing to show that these are not merely growth forms, and, indeed, one can easily find connecting forms. Growing the two mixed up together in sufficient quantity, I would defy anyone to pick out which was which; personally, I regard them as one and the same.

K.W. 6430.—This is a plant I did not see in flower. Seed of it was sent me from Gyantse, where the plant grows along the irrigation channels. The colour is described as maroon. Evidently this is *P. Waltoni*, which is a plant of the Tibetan plateau.

Finally, our solitary "candelabra," K.W. 5682, *Primula chungensis*. It is a bigger plant than *P. Cockburniana*, growing 30ins. high, with bright orange flowers, not so blood orange as those of *P. Cockburniana*. It is a woodland plant, growing in deep shade, and flowering in June.



P. FLORINDÆ. THE "GIANT COWSLIP" PRIMULA.



# HERBACEOUS FLOWERS AT VINCENT SQUARE

**H**ERBACEOUS and hardy plants formed the principal feature at the ordinary fortnightly meeting of the Royal Horticultural Society, which was held on July 28th last. The bright and warm colours of the phloxes and sidalceas were tempered to some extent by the more delicate tones of the carnations, roses and foliage plants. Among the chief exhibits were the stands of magnificent gladioli arranged by Messrs. Kelways and Messrs. Unwin. The rapid strides that have been made within the last few years in the improvement of this flower were clearly evident, if one could judge from the general habit, size, colour and floriferousness of the sprays exhibited. Year by year, novelties with some outstanding characteristics which single them out from the productions of previous years make their appearance, and one is left in a rather undecided frame of mind as to what the ultimate result will be. As with the sweet pea, so with the gladiolus, we await the arrival of a new type which will bring along with it new blood to be introduced into the older varieties. Then we shall witness a decided change; but meantime, the process is a slow one. Fruit, principally gooseberries in excellent condition, was in the capable hands of Messrs. Bunyards, Messrs. Laxton and Messrs. Hemsley. Considering the time of the season and the somewhat trying climatic conditions, the show was a most representative one.

Most certainly one could not fail to admire Messrs. Unwin's excellently arranged stand of *primulinus gladioli*. The general lay-out was quite an innovation in the method of staging. The spikes of really fine blooms were shown off to distinct advantage in tall spray golden vases and baskets, and the general effect was excellent. One of the most notable varieties, all of which were hybrids of *G. primulinus*, was *Vermilion Scarlet*, the colour of the medium-sized flowers being

of deep scarlet and the petals of good velvety substance. *Butter Boy* (of a soft butter yellow colour) and *Souvenir* (deep yellow) looked well interspersed among the more delicate pink hues of *Maiden's Blush* and the glowing salmon pink blooms of *Early Sunrise*. The blooms were all in fine condition and the spikes were well flowered.

A magnificent and well arranged collection was also to be seen on Messrs. Kelway's stand. Messrs. Kelway's name is almost synonymous with gladioli, and one always looks forward to finding many interesting things in their collection, and certainly not in vain. Included in their stand was a number of the large-flowering varieties of recent introduction, among which were *Beau Brocade*, with large and handsome flowers of deep lilac purple colour; and Kelway's *Painted Lady*, white with a crimson blotch. In their new *Langprim* varieties were *Lady Ada Fitzwilliam*, of a salmon-yellow colour with an orange centre; *Countess Poulett* yellow shaded salmon; *Lady Joan Verney*, orange salmon; *Pride of Huish*, apricot yellow; and many others in all shades. With its extensive range of colour and handsome appearance and length of flowering period the modern gladiolus should be more widely grown in our gardens than it is, and these two exhibits, we hope, will serve to create an appreciation of the many fine points, especially brilliancy of colouring, which go to make the gladiolus one of our pre-eminent border plants.

Phloxes were well represented and formed quite a bright and varied patch of colour in various parts of the hall. Mr. H. J. Jones again had a magnificent exhibit, arranged in the form of a long oval carpet, in which the most notable sorts were *Etna*, *F. A. Buchner*, the large-flowered *Thor* and *Eugene Danzanvilliers*.

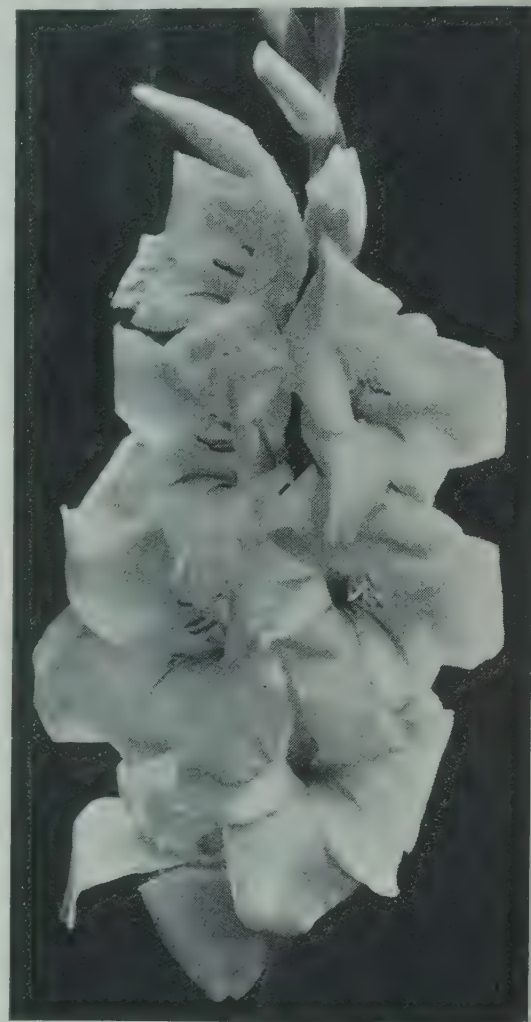
The Hon. Vicary Gibbs also staged a fine exhibit, and once again our congratulations

are extended to Mr. Edwin Beckett on his successful cultivation and raising of several fine seedling varieties of merit, among which we noted *Minnehaha*, carrying large trusses of deep pink flowers with a deeper eye; *Mrs. E. Beckett*, pinkish white; *Purple Emperor*; *Snow and Dairymaid*, white. Another fine exhibit was that staged by Messrs. Rich and Co., Bath. Their collection included such varieties as *Maréchal Foch*, *Titanic* and *Elizabeth Campbell*.

Mr. William Yandell of Castle Hill Nurseries, Maidenhead, staged a fine exhibit of violas in great variety, which were much admired, in shades of yellows, purples, and even to the almost black colour of *David Beatt*. Although small in stature, many of the individual blooms are astonishingly handsome and very attractive.

Although gooseberries were intended to be the chief

feature of the Show, there were only four exhibits of this soft fruit, two of which were very small. This was undoubtedly due to the fact that the gooseberry season is



GLADIOLUS MRS. JAMES KELWAY.

almost over. Messrs. Bunyard of Maidstone had the largest and most varied collection of gooseberries, and Mr. H. Hemsley of Crawley also showed some good specimens. Messrs. Bunyard staged over fifty different varieties, including representatives of the green, yellow, red and white types. *Keepsake* (green), *Gunner* and *Sandwich Yellow* (yellow), *Napoleon le Grande* and *London* (red), and *Queen of the Trumps* (white) were in good condition. Mr. Hemsley had some fine baskets of *Crown Bob*, *Careless*, *Keepsake*, *Cousen's Seedling* and *Whitesmith*. Mr. Frank Krant had a small exhibit of gooseberries and currants.

Messrs. Laxton Brothers of Bedford staged an interesting exhibit of soft fruit which attracted much attention, owing to the new hybrid fruit—the *Veitchberry*—which was shown. This fruit is a hybrid between the *November Abundance* raspberry and a blackberry, and it bears characteristics of both its parents. The berry is large, deep red in colour, similar to a mulberry, and is formed on vigorous growing canes which are almost self-supporting. The *Veitchberry* should prove of great value in the garden. The *Worcesterberry*, another hybrid fruit, was also shown by this firm. This hybrid has been produced by crossing a black currant and a gooseberry. Two well shaped varieties of gooseberries, *Laxton's Green Gem* and *Laxton's Bedford Red*, were shown on this stand.

Mr. E. G. Hunt of Barnstaple had a small but interesting exhibit of peaches and plums growing in pots. These trees were budded on the stock *Prunus pumila*, upon which



THE ORNAMENTAL WINGED FRUITS OF *DIPTERONIA SINENSIS*.



Mr. Hunt is experimenting. The fruit was particularly fine and healthy and the growth vigorous. The union of the stock and scion was excellent.

In many districts water lilies have flowered well this year, especially those grown by Mr. Amos Perry of Enfield, who staged a collection of beautiful varieties, among which were nymphæas suitable for water of varying depths. *Marliacea carnea*, with thick blush pink petals; *Escarboucle*, with deep red flowers; *Gladstoniana*, a large white variety with conspicuous golden yellow stamens; together with *Richardsoni*, Mrs. Richmond and James Hudson, were some of the finest varieties shown.

An unusual and decorative exhibit was arranged by Messrs. Dobbie of Edinburgh. Flowering and fruiting vegetables of all kinds were set up in bold groups. Large mop heads of flowering onions, sprays of seed pods of kales, cabbages and leeks, set off by flowers of such vegetables as carrots, celery and beans, made an effective exhibit. Messrs. Daniel Brothers showed large spikes of their shock-flowered larkspur in many shades, ranging from darkest blue to deep carmine. Mr. H. Hemsley exhibited several of his new hybrid *sidalceas*; and Mr. Lloyd of Croydon a group of hybrid begonias known as *Lloydii* hybrids, some of which were a soft pink colour.

Carnations and roses added to the brightness of the floral exhibits. Messrs. Lowe and Gibson of Crawley had several good new varieties of carnations as well as many of the older kinds, all of which were of first-class quality. Doris Trayler was a new border carnation with the sweetest clove scent; John Stobart, a white ground fancy with bright clear stripes of rose; and Dr. Stone an apricot and rose fancy. Such varieties as Laddie, Coral Glow, Cameron, Ed. Allwood and White Pearl came from Messrs. Allwood's carnation nursery; and Mr. C. Engelmann showed Mrs. Richard Gerrish, Vera, Sheila Greer and Red Laddie. The splendid condition of Messrs. Stuart Lowe's carnations was most noticeable. In every variety the flowers were large, well formed, and the calyx non-splitting.

Innocence, one of the most beautiful single roses seen at the Show, was exhibited by

Messrs. Chaplin Brothers. The cluster of reddish gold stamens makes a pleasant contrast against the pure white crinkled petals. Messrs. Waterers showed good blooms of Betty Uprichard, Los Angeles, Emma Wright, Lady Roundhay; and Mr. J. H. Pemberton had the deep velvety red variety *Château de Clos Vougeot*, Padre, The General, I. Zingari and many other fragrant varieties.

*Dracenas*, *crotons*, *caladiums*, *nepenthes* and foliage plants of all kinds were well arranged by Mr. L. R. Russell. Collections of hardy plants were staged by Mr. F. K. Wood, Messrs. B. Ladhams, Messrs. K. and E. Hopkins and Messrs. Prichard.

Alpines were shown only by Messrs. M. Prichard, who brought up a small but interesting collection which included *Campanula Halli*, which has a certain stiff, crinoline grace and is the only double *campanula* that has not sacrificed most of its beauty in departing from the type; *C. Hostii alba*, a good albino and a very cold white beside the warm ivory of *C. pusilla alba*, "*la Religieuses des Près*"; *C. Tymonsii*, rather frail and annual in appearance, but beautiful for the delicate cloudy quality of its many pale lavender flowers; *Lobelia linnæoides*, from the Falkland Islands, making a close carpet of dark green leaves like *Linaria æquitribola*, but throwing up white flowers like small, spurless butterworts, on wiry zin. stems; and our rare native *Wahlenbergia hederacea*.

## NEW AND RARE PLANTS.

*DIPTERONIA SINENSIS*.—This is a representative of the maple family from central China, and its chief beauty would appear to lie in the handsome large pinnate foliage and the rather ornamental and conspicuous winged fruits which hang in large drooping clusters. These fruits are about 1 in. long and of light brown to reddish colour, and are exceedingly attractive against the foliage. Award of merit. Shown by Mr. G. W. E. Loder, Ardingly, Sussex.

*VERONICA HYBRIDA "CARNEA"*.—This is a much brighter and pinkish flowered form of the ordinary *V. longifolia* of the most common species in our borders and which

thrives in any good soil. It is of strong and upright habit, reaching about 2½ ft., and carries a number of long erect racemes composed of numerous delicate pale pink flowers with their out-thrust stamens. The foliage is also decidedly distinctive. Award of merit. Shown by Messrs. B. Ladhams, Limited, Southampton.

*GLADIOLUS MRS. JAMES KELWAY*.—A handsome variety of the large-flowered section bearing well formed flowers composed of white petals of good substance with a purplish streak in the throat of one of them. The blooms are excellently carried on the stiff, long and erect spikes. It is certainly a variety which should prove popular. Award of merit. Shown by Messrs. Kelways, Langport.

*GLADIOLUS MARTHA WASHINGTON*.—A rather slender variety with graceful spikes about 18 ins. long bearing medium-sized flowers of good colour and substance. The colour is a shade of scarlet giving way to lighter tones in the throat, while two of the petals are streaked with very deep, almost burnt, scarlet crimson. It is a variety which will look at its best planted in beds or borders by itself. Award of merit. Shown by Mr. G. Churcher, Beckwith, Sussex.

## ORCHIDS.

*SOPHRO-LÆLIO-CATTLEYA MAGNET (S.-L.-C. Virginia × C. Hardyana)*.—In its comparatively short stature, the plant shows the influence of *Sophranitis grandiflora* contained in the parentage. The spike bore two flowers of medium size, with the segments compactly arranged, the sepals and petals purple-mauve, the labellum roundly formed, crimped at the margin, the outer zone rich purple, the inner area soft velvety crimson, the throat veined with gold. Award of merit. Shown by Lieut.-Colonel Sir George Holford, K.C.V.O., Westonbirt, Tetbury, Glos.

## FORTHCOMING EVENTS.

Aug. 11th. R.H.S. Fortnightly Meeting, Vincent Square.

Aug. 18th. Shrewsbury Flower Show.

Aug. 26th. Southport Floral Fête (3 days)

Sept. 9th. International Flower Show (Edinburgh) (3 days).

# VEGETABLES AND THEIR DISEASES

## ONIONS.

THE maggot of the onion fly does a great deal of harm to the crops in spring, especially in a dry one. Usually the cultivator waits until he sees patches of yellowing plants before taking any action. As the pupa is formed in the autumn, it therefore remains in the ground all winter and, although it is more difficult to destroy the pupa than the maggots, autumn treatment of the soil is beneficial, and to this end an application of lime on the roughly dug soil will help matters. The lime will assist in pulverising the soil and render it workable at an early date, thus enabling the cultivator to form nice seed-beds. Sow at an early date, too, to get the resultant plants well forward and tough of skin before the fly lays its eggs on stems and leaves. But here, again, we should be in good time in using preventive measures against the fly itself. Make the plants and, indeed, the whole quarter distasteful to it by spraying plants and surrounding paths, etc., with a paraffin emulsion and one from quassia extract. Use these alternately every ten days. The fly

deposits its eggs on the leaves and stems of the plant. Sometimes the late-raised plants are punctured just above the soil level and eggs deposited near by, and then the resultant maggots soon find their way down to the roots of the young plants, which are killed wholesale. When emulsions are applied they should be in the form of a fine spray, as it is not desirable that the "bloom" on the leaves should be destroyed.

Onion mildew has been very prevalent during the past few years, and it seems to come suddenly after a prolonged spell of hot, dry weather when rains and mists or fogs come. The spread of the fungus is, indeed, rapid in many instances, and, as it spreads from plant to plant, a keen look-out for its first attack should be kept. I have during the past three or four years relied much on "Abol," and on the first signs of mildew simply applied a proper strength dose to the affected leaves with a small sponge. This treatment was given to exhibition bulbs. For general use it may be sprayed on. The bulbs should be encouraged to swell a lot throughout July, and, as the mildew comes near the end

of that month and in August, fairly good bulbs will be secured even if a mild attack does come. The "Abol" destroys the "bloom" on the leaves, and because of this I apply it to the mildewed parts only with a sponge. Only in exceptional cases should onions be watered. The soil should be deeply trenched and heavily manured, mixing the manure with the soil well below the surface. The roots will penetrate after it and, in dry weather, sustain the plants better than they would scorched one day and soaked another on the surface. Any watering and liquid feeding should be done by pouring the water into holes made 3 ft. apart, thus keeping the subsoil moist. Surface mulching is very beneficial if the material be applied in good time.

## CABBAGES, CAULIFLOWERS, BRUSSELS SPROUTS AND GREENS.

Last year cultivators lost many thousands of promising plants through the ravages of the caterpillar. Large breadths of fine vigorous plants were riddled and the hearts rendered useless in the course of three weeks. The small



white butterfly has been seen in large numbers during the past fortnight. Both these and the large white butterfly are collected by the thousand by school-boys, and some good must be done; but, still, the damage is often excessive. The cabbage moth, too, will destroy the tender hearts of the plants through the action of its caterpillars, which do their fell work out of sight. A paraffin emulsion will do much good in keeping away the moths and butterflies from exhibition plants if finely sprayed on the soil about the plants: I have found quassia extract in weak doses, weak solutions of salt and water, lime, soot, and even very dry dust, preventives to some extent. But my exhibition plants—just a few of them, especially cauliflowers and cabbages—have been hand-picked twice a day in past years for several weeks prior to the shows. I do not know of any other remedies than those quoted above.

The "clubbing" of the plants does a great deal of damage, too. The gall weevil also causes swellings on the roots, the lower parts of the stems and, in the case of turnips, on the swollen base.

Soot and lime (quicklime) used together, under the surface—this is a very important point—will do a lot towards rendering the soil unsuitable for the growth of the club-root fungus and the gall weevil. If plants are once badly affected, they should be destroyed; if not badly affected, tread down the soil very firmly over the roots and then draw up soil as high as possible to the stems. Many new roots will permeate the added soil and help the plants to become fairly profitable. The trouble is always worse in light than in heavy soils. In one garden winter greens were grown for nearly one hundred years in the same part of it. When I took charge I found weevil and club-root trouble, so I relied on lime and common salt, using at digging time 2 pecks to 3 pecks of lime and 1 peck of salt per square rod. The digging, on account of the nature of the crops, had to be done late in winter and early in spring. Result: the first year a great improvement; the second a still greater improvement, and after the third year not any clubbing.

The seed-beds should always be equally carefully prepared, new ground used every year, and the plan of early transplanting in nursery beds adopted so that there may not be any check to growth.

#### CUCUMBERS.

These are often destroyed by red spider, eelworms and canker of both roots and stems. It is very difficult to get rid of the spider when once it has become established; much easier to prevent an attack. Heat and moisture assist a healthy growth and prevent red spider spreading. When the plants are syringed at closing time a very small sprinkling of fresh soot on the floor, liquid manure, or both, will keep in check red spider; dry atmospheric conditions favour its increase. Red spider breathes through its body; it sucks away the juices of the leaves and soon destroys them. Eelworms are minute creatures and

enter the roots of the plants. Their effect upon the latter is to cause them to droop and become useless in spite of watering, close temperatures, etc. The eelworm is in the soil, so new should be used for a succeeding crop, the old cleared out and the walls washed with hot limewash, the bottom of the bed being sprayed freely with hot lime too. All new composts, including leaf-soils, should be sterilised.

Root and stem canker can be avoided by having the compost a few inches higher where the plant is placed and by using a compost that is on the side of lightness. It is lack of ventilation of soil and a too moist condition combined that causes this canker. If dry lime be gently rubbed in immediately the canker



*a*, Onion fly, slightly magnified. *b*, Eggs of the fly. *c*, Larva of the fly, greatly magnified. *d, d*, Grubs or maggots inside the bulb near base. *e*, Shows how onion mildew first appears on the leaves. *f, f*, Show club-root on cabbage. *g, g*, Show grubs of turnip weevil. *h, h*, Cankered top of parsnip.

is observed and the soil maintained in a drier state just around the stem itself, the disease will rarely spread and nature will effect a cure.

#### PARSNIPS.

The leaf-miner does a great deal of harm to the plants in dry springs and when cold winds prevail, which prevent the free growth of the leaves. The same remedies should be applied as in the case of carrots. But the most serious trouble arises from canker, which renders the maturing roots quite unfit for food in a short time. Some cultivators grow their exhibition parsnips on the same plot of ground year after year, but as the soil, generally, becomes very fine and light, the canker rarely does much

harm to the roots. In the case of naturally clayey soils a change of quarters should be the rule every year and the soil ridged or trenched early in the winter, leaving the top portion very lumpy. Ordinary digging will not answer, and it will be advisable to do this in February just before the bed is prepared and the seeds are sown before the soil can pan down hard again. All manure used should be well rotted and applied late the previous summer or early in the autumn and winter, not any at seed-sowing time. Furthermore, it will be beneficial if 6 oz. of lime per square yard be applied in the autumn. Thin out the seedlings while very young so as not to disturb the one retained when advanced in growth. Hoe between the rows of plants weekly, it will promote healthy growth.

#### LETTUCE.

These plants are quick-growing, and if one crop fails another one may be raised in the course of a few days. Stem-rot is troublesome in heavy soils late in autumn and sometimes in spring among the autumn-raised plants. Extreme dampness must be guarded against, and where this stem trouble appears use old mortar rubble and lime dust when preparing the ground. Slugs, it seems, are always with us where lettuce plants are grown. Applications of lime and soot and also hand-picking are the surest remedies.

#### MUSHROOMS.

In some old buildings cockroaches are very destructive to mushrooms and woodlice are still more numerous, as the latter are everywhere, in public road, hedges and fields. Usually we cover mushroom-beds with straw or clean hay. But such covering material should be removed directly the first mushrooms appear and sheets of brown paper substituted, as the pests will not congregate as much under them. The hay, or straw, should be kept in a heap in a corner of the house with an odd mushroom or two, and a handful of bran placed under it; the woodlice will be found there mostly, and can be destroyed wholesale. The cockroaches should be killed with Keating's Powder, used just off the bed itself. Look for slugs at night and kill them, also place cabbage or lettuce leaves down as traps.

#### TURNIPS.

While the plants are in their seedling stage they are liable to destruction by the fly or flea. They should be syringed three times a week with a solution of quassia extract and fine dust at once sprinkled on, which makes the solution still more beneficial. Constant hoeing between the rows of plants helps in preventing loss through the attack of the flea. Turnips, both in a young stage and when approaching full size, are subject to club-root or "aubury," and also to the attacks of the grubs of the gall-weevil. Gas-lime, 2 oz. per square yard, applied in autumn, or quicklime, 6 oz., applied in February, will do good, also 1 peck of salt per square rod applied one month prior to sowing seeds.



# THE LILIES OF EASTERN ASIA

I HAVE nothing but praise for this fine volume ("The Lilies of Eastern Asia," A Monograph by E. H. Wilson. Imperial 8vo. Pages xiv + 110. Frontispiece and sixteen plates. London: Dulau and Co., 1925. Price 25s. net.) on the lilies of Eastern Asia. The text is clear, well arranged and full of accurate information on the history, description, distribution and cultivation of these beautiful plants. The author, moreover, is the most competent authority on the subject, as he has seen practically all the species in the wild state, and observed most of them for years under cultivation. The publishers are also to be congratulated on the excellence of the paper, printing and illustrations of the book.

Wilson recognises forty-seven species of *Lilium* indigenous in Eastern Asia; and all these are fully treated in the text. His arrangement of the species seems to me to be sound, as it stands the test of geographical distribution. His treatment of nomenclature is critical but informed with good sense. Changes have been unfortunately necessary in some cases, but Wilson has exhausted the literature to bed-rock, and future alterations in the Latin names will be trivial or unnecessary.

As an example of Wilson's discrimination of species and varieties, I may adduce the giant lilies, which constitute a section, *Cardiocrinum*, of the genus *Lilium*, that is not represented in any other part of the world. Four distinct giant lilies have been found growing wild. The type, *Lilium giganteum*, is a native of the Himalayas and the Khasia Hills, at elevations ranging from 5,000ft. to 10,000ft. A lily like this grows in mountain woods at similar elevations throughout Central and Western China; but it differs in the dark stem and in the horizontal flowers, pure white on the outer surface. Wilson now distinguishes this as *Lilium giganteum* var. *yunnanense*, thereby recognising the error into which he and I had formerly fallen of believing it to be identical with the Himalayan plant. In such a case as this, when two plants, each confined to a separate geographical territory, do differ in constant recognisable characters, I consider that it is more convenient to rank both as distinct species. I would consequently adopt for the Chinese form the name given to it by Franchet, namely *L. mirabile*. Its habit is well shown in Plate XIV, which depicts a group of these lilies in the mountains of Western China. A third giant lily grows in Central China (Kiangsi and Western Hupeh), at lower elevations. Wilson describes this as a new species, *L. cathayanum*. The fourth giant lily, *L. cordifolium*, is wild in Japan, Saghalien and the Kurile Islands. The discrimination of these four plants is evidently a natural arrangement, establishing the existence of two quite distinct species in India and Japan, while two others in the intermediate territory of China, are found to be similar, one to the Himalayan and the other to the Japanese species.

Wilson's handling of the true lilies with large, trumpet-like flowers, which constitute his section *Leucolirion*, is very skilful. Here, especially among the Chinese species, there has been much confusion, now happily

cleared up. There is no difficulty about the Nilgherry lily, *L. neilgherrense*, and the two Himalayan lilies *L. Wallichianum* and *L. nepalense*. The latter is unknown in cultivation; and the lily from Upper Burma considered to be identical with it by Baker, is proved by Wilson not to be a trumpet lily at all, being the same as *L. ochraceum*, a native of Yunnan, which belongs to the Martagon section. He has established beyond doubt that *L. longifolium*, the most abundantly cultivated of all the Eastern lilies, is endemic in the Loochoo Islands and is unknown in the wild state elsewhere.

*L. leucanthum* is the common trumpet lily of Central China at 2,000ft. to 5,000ft. elevation. It is very variable in foliage and flowers, but Wilson is content to recognise two forms, the type and var. *chloraster*, both of which were introduced from Ichang to Kew Gardens by me in 1888.

Wilson has added two magnificent lilies to this group, *L. regale* and *L. Sargentiae*, both of which he discovered in 1903 in Western Szechuan. Closely related to these is *L. myriophyllum*, the typical form of which is a native of Yunnan, whence it was introduced to Kew by seed, which I sent in 1897. Its more southerly form, *L. myriophyllum* var. *superbum*, grows in Upper Burma, and was introduced by Boxall in 1899. It was named *L. superbum* by Baker. Wilson also includes under the section *Leucolirion*, a group of three lilies, with slender stems and bell-shaped flowers—*L. Bakerianum* from Southwest China and Upper Burma, *L. semper-vivoideum* from Yunnan (not yet introduced), and *L. rubellum* from Japan. It is figured in Plate VI, growing in its native habitat with *Rhododendron Tschonoskii*. Plants raised from the Burmese form of *Lilium Bakerianum* in 1891, did not prove hardy and were soon lost to cultivation. Bulbs, however, sent lately from Burma by Lady Wheeler Cuffe, have flowered at Glasnevin under glass, but made no seeds.

Wilson deals with twenty-two species of Martagon lilies, among which he includes *L. tigrinum* and *L. speciosum*. The type of this section, *L. Martagon*, spreads from Europe and Western Asia as far eastward as the Iro River in Mongolia. One species of the section, *L. polyphyllum*, occurs in the Western Himalayas. It is very charming, and has been introduced several times, but has never secured a foothold in gardens. The most southerly species is *L. ochraceum*, which grows wild in Siam, Burma and Yunnan. Yunnan appears to be the headquarters of this section, and three species discovered in this province have not yet been introduced, namely—*L. taliense*, *L. papilliferum* and *L. Stewartianum*. We owe to Wilson, who introduced it in 1903 from Western China, the pretty *L. Duchartrei*, which grows well amid rhododendrons at Glasnevin. It was again introduced by Farrer, and renamed after him, *L. Farreri*, but the closest scrutiny fails to reveal any characters by which this plant can be separated from *L. Duchartrei*. *L. Davidii*, a native of the Tibetan-China borderland, is likened by Wilson to a refined *L. tigrinum*, being smaller in all its parts and without bulbils in the leaf-axils. *L.*

*lankongense*, also a native of Western China, is similar in most botanical characters to *L. Duchartrei*, but differs markedly in the racemose inflorescence and more numerous crowded leaves. It was introduced into Edinburgh in 1920 by Farrer. The singularly graceful and attractive *L. Willmottiae* is a native of the mountains of Central China, where it was discovered by myself in 1888. This lily is identical with *L. sutchuenense*, Franchet, figured in *Botanical Magazine*, t. 7715, but this earlier name is invalid as Franchet based his description on a specimen that is really *L. Duchartrei*. The other fine species from Central China, *L. Henryi*, which I discovered in 1888 and introduced to Kew in the following year, is well known for its great vigour and is remarkably hardy. Wilson deals at length with two well known lilies of the Martagon section, which appear to be common to both China and Japan, namely, *L. tigrinum* and *L. speciosum*. He praises highly var. *gloriosoides* of the latter species, the wild form in the Chinese province of Kiangsi, and in Formosa, and says that it is the loveliest of the coloured forms of the species, and worthy of a place in every garden.

Wilson gives a lucid account of the yellow-flowered *L. Leichtlinii* of Japan, and of its variety *Maximowiczii* with red flowers, which is widely spread in the mountains of Korea and Japan. Plate XI shows a fine view of the latter plant in its native home.

The section *Archelirion* is restricted by Wilson, and includes only one species, *L. auratum*, the noblest of all the lilies as regards the flowers. It is the Yama-Yuri or mountain lily of the Japanese, and is still a common wild plant in parts of Hondo. It grows on black, volcanic soil on the margins of woods in a region with a heavy rainfall. Wilson tells the story of how the Japanese exporters exhausted the supply of the wild plant and then began growing the bulbs in rich farm land for the European market, and from this practice arose the troubles of the cultivator. He advocates the planting of small, wild bulbs in light, sandy poor soil, where drainage is perfect, and among shrubs to protect the stems and leaves from direct sunlight.

The preceding notes, which I have culled from Wilson's book, could be indefinitely extended, if space were available. Special attention must, however, be drawn to the introductory chapter on "Lilies in their Natural Haunts," from which useful hints for cultivation may be taken. He recommends the planting of lilies among ferns or dwarf shrubs, such as lavender, wild roses, ericas, azaleas, dwarf rhododendrons, shrubby veronicas and olearias. It must be remembered, however, that while rhododendrons require peat, a great many lilies detest peat. Wilson believes in mulching, and recommends covering the bulbs in autumn with rotted leaves or exhausted manure. All the species benefit from planting as early in autumn as possible. At Glasnevin, experience teaches that raising from seed is the only way to keep up a healthy stock. When raised from bulbs or bulbils, the stock of most species appears invariably to deteriorate. AUGUSTINE HENRY.

## SERVICE FOR READERS

Though so many subjects are dealt with in each issue of THE GARDEN, it must constantly happen that readers seek information which is not immediately available. In such circumstances they should make use of our new Service Department. Through its medium each reader's own particular enquiry can be dealt with. No matter what the question is, whether advice is sought as to—

RESTOCKING A GARDEN, COLOUR SCHEMES FOR GARDENS, THE BEST PLANTS FOR CERTAIN SITUATIONS, WHERE TO OBTAIN NEW AND RARE PLANTS, INSECT PESTS, NAMING OF PLANTS, AND THE HUNDRED AND ONE OTHER DETAILS RELATING TO THE GARDEN—

there is always information available from a staff of expert contributors and consultants; and there is no charge for this. It is one of the additional means of Service which THE GARDEN is glad to render to its readers.

All communications should be addressed to the Service Department, THE GARDEN, 20, Tavistock Street, Covent Garden, London, W.C.2.



# NOTES FROM CONTRIBUTORS

## LACHENALIAS.

IT may be well to remind readers of THE GARDEN that the time is at hand for dealing with these plants if the full beauty of which they are capable is to be obtained. Bulbs planted or potted up in late July give a very different result as compared with those planted in, say, September or October, both in vigour of growth and in the lasting qualities of the bloom. The grand spikes to which an award of merit was given at Vincent Square in February were potted up in July, and were a striking illustration of the value of early treatment.

Lachenalias are ideal plants for a cold house or a frost-proof frame, and the more recent introductions include some very beautiful varieties; but to get the best out of them they should be dealt with immediately.—W. D.

## CISTUS RECOGNITUS.

IN a representative collection of cistus the subject of this note is certainly one of the most beautiful and interesting. The flowers, which appear in June, are about 3ins. across, with broad, overlapping white petals, the base of each being lit by a flare of vivid citron yellow, rayed upon its outer margin by streaks of carmine. The shrub grows about 4-5ft. high, the flowers are borne in clusters, and the leaves, as well as the flowers, bear no little resemblance to those of *C. Loretii* (*lusitanicus*).

*C. recognitus* is, according to Mr. W. J. Bean ("Trees and Shrubs"), a hybrid between *laurifolius* and *monspeliensis*, and it is described by him as being "close to *C. Loretii*" (itself a *ladaniferus* × *monspeliensis* hybrid), but with "unspotted flowers." This, it will be seen, is at variance with the above description of the shrub, as sent out by the few nurserymen who stock it, and also with that given by Sir Herbert Maxwell ("Flowers: A Garden Note Book"). Can anyone put the matter right and say what *C. recognitus* is or ought to be? It is probably of Continental origin, and it may be that Mr. Bean has since had reason to differ from the statements originally made in his great work. At any rate, to my unskilled eye there is little to suggest any *laurifolius* influence in *C. recognitus*.—A. T. JOHNSON.

## FIGS.

THE cultivation of figs outdoors is quite simple, providing the site is a suitable one. On the south coast figs can be grown in almost any shape or form without any protection; but in cold districts a sunny wall—facing south or south-west—is essential for success.

The fig thrives best in a good but not very rich loamy soil, containing plenty of old lime or mortar rubbish, crushed bones or the like, and made quite firm—almost hard, in fact. When the trees fairly begin to grow, in the spring, they should be carefully gone over and all superfluous shoots rubbed off; while any very strong growths must either be stopped or cut back severely, but retaining the short-jointed twiggy portions, which produce the bulk of the fruit. Outdoors the figs are borne on the previous year's wood; it is seldom that fruits will mature on the current season's growth, as it does indoors.

Some protection may be needed for the trees during cold spells and a good way to afford this is to tie up the branches in bundles of bracken or hay, or hurdles covered with matting may be laid against the wall, with bracken or straw placed underneath. It is an advantage if the protecting material can be removed on bright sunny days; the hurdle cover method is, therefore, perhaps, the best

Under glass, figs may be successfully grown in pots, and with judicious culture and the command of plenty of heat as many as three crops of fruit may be obtained in a year—it is quite an easy matter to get two—while in the open one has to be content with but one set of fruits. Cuttings are easily rooted in pots of sandy soil in a hot-bed, or even on a sunny border in the open. For outdoor culture Brown Turkey, Brunswick, White Marseilles, Black Ischia and Osborne's Prolific are good varieties.—R. D.

## SOME HEUCHERAS.

TO some, the native heuchera means the popular species *brizoides* and that only; but there are other kinds of equal merit and, in addition, several fine varieties. *H. sanguinea splendens* has fine spikes of brilliant crimson flowers, and other varieties of this same species include the really fine things *Edgehall* (bright rose) and *Rosamundi* (rich coral pink), both free-flowering and as tall as *splendens*. We also like the species *alba*, a distinct white with very pretty foliage, and *micrantha* with its red stems and long spikes of small whitish flowers. *HH. pubescens* and *Richardsoni* are not, however, quite so fine as the others, although they are effective enough in the rock garden and make quite attractive plants. Profusion is our best white; *Flambeau*, a variety we could not miss on account of its flaring red flowers; and there is also *Zabeliana*, a pink, whose long stems are among the finest for cut bloom.

Heucheras should never be left to themselves. We make it a rule to lift the clumps each spring, dig the soil well and add a light dressing of manure (or guano and leaf-mould when manure is scarce), then we separate the clumps and plant the best shoots. In this way the colours remain true, the plants are strong, and the spikes both large and attractive.—HUGH H. AITKEN.

## CERASTIUM ALPINUM LANATUM.

FEW of the cerastiums are much grown in rock gardens, but *C. tomentosum* is a well known plant in many places where, although rather too spreading in its habit, it has been appreciated on account of its silvery foliage and its wealth of white flowers, which have given it the popular name of Snow in Summer. Of the other species which the writer has put through his hands one of the most interesting has been that called *C. alpinum lanatum*. It differs greatly from *C. tomentosum* in its appearance, and, although it has white flowers also, they are not borne in such profusion nor do they give the effect of those of its sister flower. It owes its main attraction to its mats or small carpets of silvery foliage which that able grower, Mr. Clarence Elliott well describes as "like chinchilla fur which has been remodelled several times." It is emphatically a subject for the plant lover who seeks for other features than brilliant displays of flower and can find delight in such points as this. It is not difficult to cultivate in a sunny, well drained part of the rock garden in stony, sandy soil, or, better still, in a moraine. But those who live in districts where there is a heavy winter rainfall will be well advised to give *C. alpinum lanatum* the benefit of the shelter of a sheet of glass overhead during the winter months. No difficulty will be experienced in propagation by division or cuttings.—S. ARNOTT.

## ERYTHRÆA MASSONI.

BEING of dwarf growth (never more than 6ins. high), compact habit and very free flowering, *Erythræa Massoni* is an ideal plant for the rockery.

The flowers, which are of a rich, rosy pink hue, are usually seen at their best in July. The plant, which is a perennial, can be increased by division in the autumn or in spring (of the two seasons I prefer the former), though, perhaps, the better method of increase is from seed. By sowing the seed, under cover, in spring and pricking off the seedlings singly into small pots or, if desired, into boxes and allowing them to remain thus for the first year, it will be found that they are strong, healthy plants for putting out on the rockery the following spring.

A light soil coupled with a sunny position will be found most suitable. It may be advantageous to cover the surface of the pocket with fine granite chips, for these, in addition to preventing the soil from becoming parched in the summer, also act as a blanket for the roots in winter.—W. H., Glasgow.

## INCREASING HYACINTH BULBS.

A DUTCH method of securing a large number of small hyacinth bulbs is really worth trying. The plan may be carried out in the summer with any hyacinth bulbs, providing that these are well ripened and the foliage has been allowed to die down naturally. Take the bulb and, with the root part upwards, drive a knife into the underside with its point inclined towards the centre. Carry the cut all round, so that the base of the bulb is removed in the shape of a cone. This portion may be thrown away, as it is of not much use, although, on occasion, it will grow if planted. The remaining part of the bulb, which has been hollowed out in the form of a cup, is put on the shelf of a greenhouse or in any similar position where it is fully exposed to hot sunshine. In course of time, this part of the bulb, technically known as a "mother," will send off large numbers of tiny bulblets. These grow rapidly and, when they are about the size of hazel nuts, they may be gathered and planted in soil. It is rather a good plan to put the bulbs in a bed where they need not be disturbed. Rarely are flowers produced in the succeeding spring, but, in the next season, small graceful spikes are developed. While these hyacinths never display blooms of massive proportions, they produce flowers which are useful for cutting, so that the experiment is well worth while.—S. L. BASTIN.

## MUTISIA DECURRENS.

THOUGH introduced many years ago, this curious climbing shrub is still very uncommon, probably owing to the fact that it has been a disappointment to so many.

In the first place, *M. decurrens* is quite hardy enough for most districts, in spite of the fact that it is a native of Chile and an evergreen. It appears to resent too hot a place—such as a south wall—and to have a partiality for a westerly aspect and a root-hold of light soil which is not too hot and enriched with a liberal quantity of leaf-mould. Planted on the shady side of some slow-growing bush, 5-6ft. in height, its wiry stems will ascend into the branches, to which the leaves, whose midribs end in a forked tendril, will cling with extraordinary tenacity. At the ends of the current season's shoots the composite flowers appear singly, each on a stout 4-5in. stalk. The buds of these, being a soft steely green and enclosed in a number of close, overlapping scales, rather suggest the head of a globe artichoke in miniature. But no sooner has the wonderful flower expanded its splendid rays, fourteen to twenty in number, ½in. wide and of a glowing orange-vermilion, than the likeness to that prosaic vegetable is suddenly transformed into that of some glorified gazania.—N. W.



SEEDSMEN BY



APPOINTMENT

# CARTERS PICKED BULBS



GOLD MEDAL AWARDED TO CARTERS EXHIBIT OF HYACINTHS  
BY THE ROYAL HORTICULTURAL SOCIETY, MARCH, 1925

Carters Picked Bulbs for Early Forcing and Planting for Christmas and Easter Flowers. Carters Royal Parks Bedding Hyacinths, Tulips and Narcissus. The new Catalogue contains particulars of special colours of Freesias, etc.

WRITE FOR ILLUSTRATED  
C A T A L O G U E

**Carters**  
TESTED SEEDS

Bulb Growers and Grass Specialists

RAYNES PARK, LONDON  
S.W.20



## Banish White Fly

Snow Fly on Tomatoes and Cucumbers can easily and safely be eradicated by means of Abol White Fly Compound. No apparatus needed. Simply pour the Compound down the centre path of the House at the rate of 2½ fluid ozs. to 1,000 cubic feet of space.

Sold in round tins as under. When reckoning quantity required allow ½-pint for each 2,000 cubic feet.

Size	Price	Postage
½-pint	1/-	6d.
¼-pint	1/9	6d.
Pint	3/-	9d.
Quart	5/-	9d.
½-gallon	8/-	1/3
Gallon	15/-	2/6

Of all Nurserymen, Seedsmen, Florists, Ironmongers, Chemists and Stores. Abol Limited, 9, Beltring, Paddock Wood, Kent.

Write for descriptive Folder.

**Abol**  
**White Fly Compound**



## ADCO DEFIES THE DROUGHT!

The recent spell of dry weather has caused real anxiety to gardeners. Those who wisely turned last year's Garden Rubbish into

**SYNTHETIC FARMYARD MANURE** are in the best position to-day. Soil organically manured always withstands drought for a longer period than that dressed with artificials alone. Next year may also be a dry one. If wet, you will still require organic manure. Make it now.

As refuse accumulates treat it with

### ADCO ACCELERATOR

If at least half consists of soft green materials such as lawn cuttings, cabbage leaves or green weeds; but when dead leaves, vegetable stalks, herbaceous border cuttings, prunings, straw and straw packing, form the bulk of the heap, use **Standard ADCO**.

If your dealer does not stock ADCO write direct to us, mentioning his name and nearest Goods Station. 1 cwt. of ADCO makes from two to three tons of manure according to the class of rubbish treated.  
ADCO Accelerator .. 28 lb. 4/6, 56 lb. 8/-. 1 cwt. 15/-  
Standard ADCO .. 28 lb. 6/- 56 lb. 11/6 1 cwt. 20/-

Carriage Paid to Nearest Station. Cash with Order.

ADCO Ltd.,



40 HARPENDEN, HERTS



## McDOUGALL'S PERFECT SAFETY WEEDKILLER

Keeps paths and drives free from unsightly growth.

Being entirely free from poison its use does not involve the slightest danger to children or domestic animals, or any fear of poisoning poultry, game, etc.

Pint tins	...	1/6	1 gall. drums	6/6
Quart	...	2/6	5	25/-
½ gall	...	4/-	40	casks £7/10/-

1 pint Weedkiller to 3 gallons water.

Sold by  
Nurserymen, Seedsmen,  
Ironmongers, etc.

If you have any difficulty in obtaining apply direct to:-

**McDougall & Robertson, Ltd.**  
BERKHAMSTED, Herts.  
(formerly of Manchester.)





# SIMPLE GARDENING

## A FEW HINTS ON EXHIBITING.

**D**URING the month of August and the early part of September, many flower, fruit and vegetable shows will be held throughout the country. Cultivators of garden produce, especially amateurs, like to exhibit some of the things that they grow, and a few hints may be helpful to them. The earliest roots will now be available, such as beet and carrots, and bulbs such as shallots and onions. These specimens should be dug up, not forcibly drawn, or the skins, now so tender, will be bruised. Soak the roots in water and gently sponge off the soil—do not scrub with a brush. Treat potatoes and turnips in a similar way, and then wrap all separately in soft paper. They may then, with ease and safety, be packed quickly in boxes ready to convey to the show.

Runner and dwarf French beans and peas should be gathered at sunrise while the dew is on them; pack these in thin layers—single layers if convenient—in small boxes on damp moss as they are gathered. The plants should be mulched but not watered; in the evenings of hot days a gentle spraying of the leaves will do good. Border plants, especially annuals, will benefit if a little thinning-out is done, even now, where plants are growing too closely together. All spikes or individual flowers should be selected so that all may be even as regards size. The stems should be placed in water and the flowers taken to the show in vases, if possible. The next best thing is to place damp moss on the stems in the boxes. Fruit should be ripe and nicely coloured, and the foot-stalks retained on tomatoes.

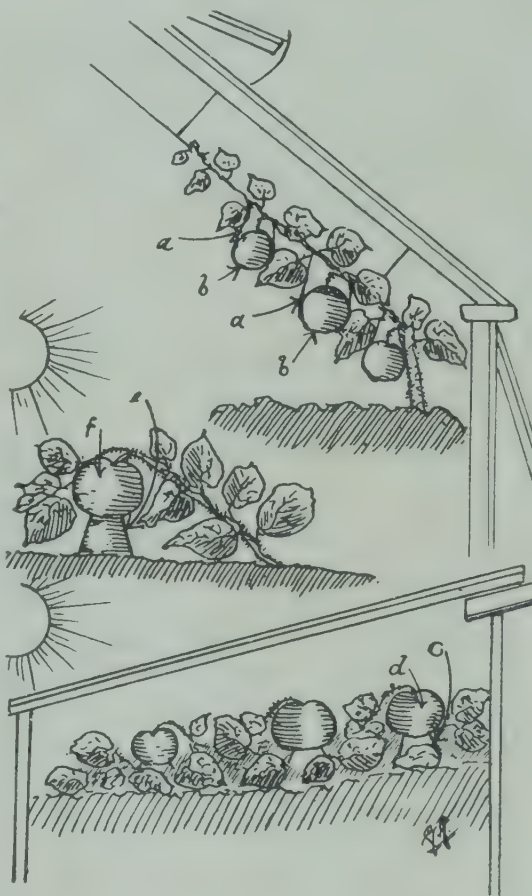
## MUSHROOM GROWING: PREPARING THE MATERIALS.

It is the ambition of many amateurs to succeed in growing mushrooms—in properly constructed mushroom-houses, in cellars and outbuildings, or under the stage in the greenhouse. It does not matter how ideal the structure may be, if the materials are wrongly prepared failure will result. Some inexperienced cultivators may not know which are the best materials. These are, undoubtedly, sweetened horse manure and oak and beech leaves, mixed. But I have grown fine crops of mushrooms in pure leaves pressed down firmly to form a ridge 3ft. high and the same distance across the base. Soil in sufficient quantity only to cover the bed to a depth of 2ins. was used, and a good thatch of straw 1ft. thick was used in addition to the leaves. For this kind of bed, made in the open air, the autumn is the best time; and the best position is one with a dry base and facing north. For manure beds the same position is ideal. The present is a good time for constructing beds under cover—that is, in buildings. Manure from stables should be collected every day and placed in a thin layer in a cool, dry shed, and be turned over daily to allow the rank gases to escape. When sufficient has been collected to form the bed, use two parts

manure and one part of leaves, making the materials very firm by treading. The proper time to insert the lumps of spawn is when the temperature of the bed registers about 80° Fahr., on the wane.

## RIPENING AND SUPPORTING MELONS.

Last year it was very difficult to get the fruits ripe in cold frames, as the weather was so adverse. This year, melons growing in houses and in frames on beds will ripen very satisfactorily if the plants and fruits are properly treated. As the fruits approach the ripening stage, less water should be given and more air admitted—a little throughout the night, too. The plants should be maintained in a healthy condition as long as possible, not by mere wetting of the surface occasionally, but by thorough waterings when the soil is



approaching dryness. At these times be sure that the soil, forming a circle about 6ins. across, with the stem of the plant in the centre, is kept quite dry. The foliage must not be syringed at this stage, but the floor of the house, or surface of the soil round the sides of a frame, may be damped every fine day. Melon fruits, when ripening, are full of juice, and their skins or rinds are thin and easily broken—cracked. The flow of sap through the stem to the fruit causes the skin of the latter to crack in a circle round it, and then the fruit must be supported by other means, or it will fall off. In the sketches it is shown how the necessary support can be given. Under the roof in a house, *a, a* show how soft string or nets may be placed to support the fruits *b, b*. In a frame an inverted pot, *c*, will support the melon, *d*, above the leaves. This is also shown at *e* and *f* respectively, so that the full benefit of the sun may be obtained.

## THE GREENHOUSE AND THE PLANTS FOR WINTER FLOWERING.

The inside of a greenhouse gets dirty sooner in winter than in summer. It should be cleaned thoroughly twice a year—that is, all the plants should be taken out or placed on one side and the whole of the interior—glass, wood and stages—cleaned. Use clear water only for the glass, and begin with the roof glass first; soapy water would “cloud” it. But soapy water should be used on the wood itself, and all wires and fastening staples dressed with pure paraffin to kill any insects hiding there. If cinders or gravel are spread on the slates on stages these should be washed and dried before they are replaced. It is a better time, now, to paint the interior of the greenhouse—rafters, stages, doors and shelves—than in spring, as the paint will harden during the autumn and winter and not blister. All permanent plants should be well cleaned before they are replaced, the smooth-leaved ones, such as palms, dracenas and aspidistras, sponged and syringed; and, of course, all pots must be scrubbed and the drainage examined. Other kinds of plants should have the faded leaves and flowers removed. Generally, plants in the winter-time require more space than during the summer, and so this is a suitable time for discarding any specimens not really worth retaining. In connection with this matter, additional ones, such as chrysanthemums, carnations and salvias, now outside, must be considered.

## CINERARIAS, PRIMULAS AND CALCEOLARIAS IN COLD FRAMES.

These plants, where the management is good, grow rapidly from July to October. Till quite the end of September, with a few exceptions the glass lights should be removed during the night, as night air and dews are so beneficial to the plants. The exceptions are nights on which stormy weather or frosts may prevail. Usually, we experience a few frosts about September 6th, so extra care should be observed from the first to the tenth of that month. The final re-potting should take place during August, so that the plants will be well rooted before the dull days of winter come. Equal parts of old rotted turves and leaf-soil, with a free sprinkling of old mortar rubble reduced to small pieces and dust, will form a good compost for the cinerarias and primulas. More loam should be added for the calceolarias. One sometimes sees primulas falling over in the pots as they gain in size; this is owing to the potting being wrongly done. The crowns must not be under the soil level, but the plant should be placed well down, then it will grow sturdily and firmly in the pot. To keep the leaf-miner fly away, soak some dry sand in paraffin oil, then scatter the sand on the bed under and between the plants, but not touching them.

GEORGE GARNER.



# THE GARDEN.

**EBB'S BULB CATALOGUE FOR 1925**  
Now Ready. Beautifully Illustrated. Post free on request.  
EBB AND SONS, LIMITED, The King's Seedsmen, Stourbridge.

**ATERER'S FOR THE BEST IN BULBS**  
Forcing, Bedding, Naturalising, etc. Autumn-flowering  
Cusces and Colchicums. Our new illustrated catalogue is now  
ly. Post free.  
**ATERER'S ALPINE AND PERENNIAL PLANTS**,  
uding all the best in Lupins.  
**ATERER'S GOLD MEDAL RHODODENDRONS**, Azaleas,  
hardy Shrubs, Yews, Conifers, etc.  
**ATERER'S NEW ROSE AND FRUIT TREE Catalogue**,  
uding all those varieties really worth growing.  
y descriptive and illustrated catalogues ready shortly.—  
N WATERER, SONS AND CRISP, LIMITED, Twyford (Berks),  
shot (Surrey), and London.

**AKELEY'S PATENTED HOP MANURE.**  
he original and only substitute for Stable Manure. See  
ert. on back cover.

**M. DUNCAN TUCKER & SONS, LTD.,**  
rence Road, South Tottenham, N.15.—Conservatories,  
ter Gardens, Vineries, Peach Houses, Portable Buildings, etc.

**RDS' BATHS, GARDEN VASES, SUN-**  
**LS, NESTING BOXES.** Catalogue (No. 4) free.—  
ORTON, 60, Buckingham Palace Road, S.W.

**IRE NETTING.**—From 2/10 per 50yd. roll.  
apest House in the Kingdom. Write us for prices.  
usands of rolls stocked. Raffia, 7d. lb., postage extra.

**NTS.**—Army Bell, All Complete, New  
ings, Deep Walls from 55/-. Scout Tents, 24/6. Garden,  
ning, and all kinds of Tents and Marquees supplied.

**AMBOO CANES.**—3ft., 4/- per 100;  
age 9d. Quantities cheaper. Deck Chairs, 3/9.—  
B. HAWTHORN, LIMITED, Dept. E., Shrewsbury.

**NCING.**—Chestnut Pale Fencing and  
len Screening. Illustrated Catalogue on request.—THE  
LEY UNDERWOOD CO., LIMITED, 48, Shottermill, Haslemere,  
ey.

**RE AND CHOICE DAFFODILS.**—Our  
of fine New Seedlings, cultivated on our disease-free ground,  
ow ready, and will be sent, post free, to applicants.—  
BERT CHAPMAN, LIMITED, Rotherside Gardens, Rye, Sussex.

**NADIAN AND AMERICAN GLADIOLI.**—  
best of the standard varieties and novelties.—J. W. CROW,  
oe, Ontario, Canada.

**OCKERY**, well weathered water worn,  
tifully coloured, Cheddar Gorge Rockery Stone, any size  
s or quantity; also dry wall stone for sale. Inspection  
ed. HIGHMAN, Rockery Depot, Wells.

**VERS' STRAWBERRIES**, small plants  
ots and bedded runners. Price list free on application.  
lect stock of Fruit Trees, Roses, Vines and Orchard House  
s always on view.—THOMAS RIVERS AND SON, LIMITED,  
Nurseries, Sawbridgeworth, Herts.

**ALL AND WATER GARDENS.** With  
ters on rock gardens, heath gardens, and paved water  
ns. By GERTRUDE JEKYLL. 7th edition, revised. 17s. 6d.  
y post, 18s. 4d.—Published at the Offices of "COUNTRY  
" LIMITED, 20, Tavistock Street, Covent Garden, W.C. 2.

**PROVE YOUR GARDEN** by the use of  
Oak Trellis Screens; they are ideal for growing creepers  
kinds and for securing privacy, at the same time adding  
istic feature that will last a lifetime (being pickled in  
rative). No trouble to erect (being made in sections).  
for lists and get an estimate from W. T. REVITT, Railway  
s, Olney.

**BARR'S AUTUMN-FLOWERING BULBS.**—  
COLCHICUMS, CROCUS SPECIES, NERINES, WHITE  
ROMAN and EXTRA EARLY LARGE-FLOWERED  
HYACINTHS, etc. List on application.—BARR & SONS, King  
Street, Covent Garden, London, W.C.2.

**IRON AND WIRE FENCING FOR GAR-**  
**DENS.**—Ornamental Iron and Wire work of every description.  
Catalogue G. 156. Iron Fencing and Tree Guards. Catalogue  
G. 65. Wood and Iron Gates. Catalogue G. 163. Kennel  
Railing. Catalogue G. 86. Poultry Fencing. Catalogue G. 70.  
Ask for separate lists.—BOULTON AND PAUL, LIMITED, Norwich.

**THE DOUGLAS CLOVES and Hardy Border**  
Carnations are now famous throughout the world. Glorious  
scent, stiff stems, perfect calyx, and perpetual habit. They  
flourish in the coldest parts of Britain. Extract, "The Times":  
"Mr. Douglas is the leading raiser of this flower. His wonder-  
ful strain of new cloves is superb, etc." Our new catalogue is  
now ready.—J. DOUGLAS, The Premier House for Carnations,  
Great Bookham.

## CONTENTS.

	PAGE
Editorial: A Request .. ..	453
Androsaces .. ..	454
Conservatory and Greenhouse .. ..	456
Lupins and Delphiniums .. ..	456
Notes of the Week .. ..	458
Crocus zonatus, Rosemary, Sterilisa- tion by Cresol, Mimulus Bartonianus, Notes from Reading, The Herbaceous Peony in Canada, Plants in Northern Africa, Satan's Snuff-box.	
Notes on Strawberry Culture in the Open.	460
Correspondence .. ..	462
Fortune's Yellow Rose, Glasshouses, Pronunciation of Botanical Latin, Rose Arthur Cook, Feijoa Sellowiana, Olearias, Failure of Gypsophila.	
Simple Gardening .. ..	463
Fair Crowns. II—Delphi and Apollo's Laurel .. ..	464
Flowers at Hayward's Heath .. ..	464
The Spread of Gardening in America .. ..	465
Ranunculus ficaria .. ..	465
Killing Slugs .. ..	466
Book Reviews .. ..	466

**LOOK! TANNED GARDEN NETS.**—All  
orders despatched same day. 25yds. by 1yd, 2/-; 25 by 2,  
4/-; 25 by 3, 6/-. All carriage paid. Any size supplied. Also  
Tennis Boundary Nets.—MOORE AND CO., Net Works, Rye.

**BARGAINS IN GARDEN WIRE, ETC.!!**  
Government paid twenty times our price. Ideal for training  
Peas, Tomatoes, Fruit Trees, Arches, Logans, Beans, Hops,  
Greenhouses, Pergolas, Chrysanthus, Tying, Fencing, etc. Steel-  
stranded, waterproof covered, durable. 19/6 mile (full 1,760yds.).  
Small lots quoted. Get free Samples and list 300 bargains.  
Postcard to-day!—GREEN'S GOVERNMENT STORES, 213, Albert  
Street, Lytham.

**POULTRY BARGAIN**, 300 month old White  
or Brown Leghorns, 1/6 each, 18/- doz.; two month, 3/-, 36/-;  
three month, 4/-, 48/- doz. Carriage paid.—CONTI FARM,  
Stratford, Essex.

**CYCLAMEN—SOW NOW!**—In six colours,  
or mixed, 2/6 per packet; also Corms (dormant, ready to  
pot-up), 1/3 each or 12/- dozen, and young plants for potting-  
on, 9/- dozen. Our famous strains, including Salmon King  
Pink Pearl and Cherry Ripe, the nearly scarlet variety.—  
STUART LOW AND CO., Bush Hill Park, Enfield.

**CHOICE DAFFODILS**, surplus bulbs from a  
large collection. Apply for list. NASH, Knoll Lodge,  
Burnham-on-Sea, Somerset.

## SUTTON'S CABBAGES.

The best varieties for spring cutting are:  
Sutton's Harbinger .. .. per packet, 1/- and 1/6  
Sutton's April .. .. per packet, 1/- and 1/6  
Sutton's Flower of Spring .. .. per packet, 1/-; oz., 1/6  
"I have never grown such lovely Cabbages as I have this  
Spring from your Harbinger seed. Of 5,000 plants not one  
bolted. I can strongly recommend Harbinger as the finest  
Cabbage in cultivation for Autumn sowing."—Mr. J. Parkins,  
North Hill.  
SUTTON & SONS, THE KING'S SEEDSMEN, READING.

**DOBBIE'S FAMOUS BULBS, FAMOUS**  
**SCOTCH ROSES** which succeed well everywhere. Pre-eminent  
Sweet Peas for Autumn Sowing. Catalogues ready now, post  
free with pleasure. Send for one to-day, mentioning THE  
GARDEN.—DOBBIE AND CO., LIMITED, Edinburgh.

**CHEAP GOVERNMENT WIRE!!!**—Great  
for training fruit trees, peas, beans, hops, arches, greenhouses,  
tomatoes, logans, tying, fencing, etc. Strong, flexible, steel-  
stranded and waterproof covered. Several thicknesses from  
19/6 per mile (full 1,760yds.). Small lots quoted. Postcard  
to-day for free samples and list of 300 bargains.—GREEN'S  
GOVERNMENT STORES, 69, Albert Street, Lytham.

**NEW ZEALAND PLANTS for Seaside**  
Gardens.—Pittosporum nigrescens for hedges, pot grown  
plants for planting now, 18/- per doz. Olearia Macrodonia,  
1 1/2 ft., 12/- doz., splendid for hedges. Olearia Haastii, 1ft.,  
12/- per doz. Brachyglottis repanda, 2/6 and 3/6 each. Clematis  
indivisa, 2/6 each. Ozothamnus 2/6 each. Muehlenbeckia  
complexa, 1/6 each.—TRESEDER AND CO., The Nurseries,  
Truro.

**SEWAGE DISPOSAL FOR COUNTRY**  
**HOUSES.**—No emptying of cesspools; a perfect fertiliser;  
no solids; no open filters; perfectly automatic; everything  
underground. State particulars.—WILLIAM BEATTIE, 8, Lower  
Grosvenor Place, Westminster.

**PRIMULA AND ALPINE SEEDS** from  
choice (1,500 collection). Rare Seedlings and Rockery Bulbs.  
Lists free.—REV. J. F. ANDERSON, Glenn Hall, Leicester.

**HOW TO HEAT YOUR HOUSE.**—By Edwin  
Gunn, A.R.I.B.A. Better Lighting—Cheaper Fires—Hotter  
Baths—Healthier Air. Just Published, 2/6 net.—Published at  
the Offices of "COUNTRY LIFE," LIMITED, 20, Tavistock Street,  
Covent Garden, W.C.2.

**ALPINES, ROCK PLANTS ONLY.**—Descrip-  
tive Catalogue 600 varieties, free.—TERRY LEE, F.R.H.S.,  
12, Morden Road, Stechford, Birmingham.

**JAMES BACKHOUSE, F.L.S., F.R.H.S.**, for  
many years chairman of the late firm of James Backhouse and  
Son, Limited, having retired from York, offers his services as  
Garden Consultant. 30 years' experience, specially in connec-  
tion with Alpine and Herbaceous Plants. Advice given for  
Rock Garden construction and planting, also for permanent  
Flower Borders, boundary Plantations, etc. Address for terms  
to CAER FEGLA, Arthog, North Wales.

**THE WELSH BULB FIELDS** were awarded  
the Gold Medal at the Dutch International Show last April.—  
A list of Daffodils, Tulips, and other Bulbs will be sent on  
application to the Secretary, THE WELSH BULB FIELDS, St.  
Asaph.

**ORCHIS FOLIOSA**, splendid flowering roots  
of this charming hardy border plant ready to plant in  
September. 2/6 each; 10 for 20/-.—MORRIS, Formakin Gardens,  
Bishopton, N.B.

**GREENHOUSE PAINTING AND GLAZING.**  
—"Vitrolite," superior to White Lead Paint, 18/6 per gallon,  
cans extra. "Plastine," the Imperishable Putty, 32/- per cwt,  
kegs extra; 7lb. tins, 4/-, pos free; 14lb. tins, 5/6 each, carriage  
extra, tins free.—Full particulars from W. CARSON AND SONS,  
Grove Works, Battersea, S.W. 11.



SEEDSMEN BY APPOINTMENT



# LAWNS

At the end of the season all lawns should be reconditioned immediately if the turf and surface are to be in good condition for the following season, consequently, preparations should be made in advance and all the required materials—Grass seed, Fertiliser, Wormkiller, etc., assembled.

BOOKLET ON  
"LAWNS"  
POST FREE

**Barter's**  
TESTED SEEDS

RAYNE SPARK, LONDON  
S.W. 20



**ROCKRAVEN GARDEN STONE**  
COMPANY SUPPLY POROUS LIME-  
STONE ROCKS FOR ALPINE SUBJECTS;  
WEATHER-WORN BY THE STORMS  
OF CENTURIES INTO DELIGHTFUL  
POCKETS, LEDGES AND FISSURES.  
"VARIED SHAPES AND SIZES"

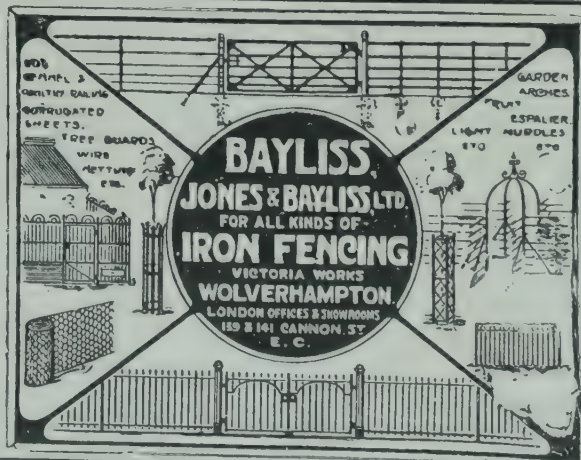
APPLY: SECRETARY  
LINTON-IN-CAVEN, SKIPTON, YORKS

## THE DOWNER LUPIN.

Rich Harmonious Colours. 18/- doz. Clumps.

Write for List and Coloured Plate.  
ORDER PLANTS FOR AUTUMN.

DOWNER, 2, Drayton Manor Nurseries, Chichester.



**"Auto-Shreds" did it!**

I just burnt them on the ground and they thoroughly fumigated my plants. The judge wanted the name of the stuff that kept my flowers so insect-free. I told him "Darlington's AUTO-SHREDS." At all seedsmen they cost

- No. 1. (To fumigate 10,000 cubic feet.) For tender or ordinary plants, 6/-
- No. 2. (10,000 c.f.) Ordinary plants, 4/6
- No. 3. (1,000 c.f.) Ordinary or tender plants, 1/-
- No. 4. (2,500 c.f.) do. 1/9

**W. DARLINGTON & SONS, LTD.,**  
HACKNEY, LONDON, E.8.

## GOLD MEDAL DELPHINIUMS

Awarded R.H.S. Gold Medal in 1924 and 1925.

Received 17 Awards of Merit at the R.H.S. trials, Wisley this Summer!

ORDER NOW for Autumn Delivery:—

Choicest named varieties, our selection.

15s., 22s., 30s., 42s. and 65s. per doz.

CATALOGUE FREE.

BLACKMORE & LANGDON

BATH

Please mention THE GARDEN when writing.

## Notes from Maidstone.

STRAWBERRIES,  
GOOSEBERRIES  
& BUSH FRUIT.

OUR special illustrated catalogue of these is now ready and will be sent with pleasure to any readers of this paper.

We are now able to offer a large selection of Gooseberries, and all interested in this valuable fruit should procure a copy.

George Bunyard & Co., Ltd.,  
The Royal Nurseries,  
Established 1796. Maidstone.



## Banish White Fly

Snow Fly on Tomatoes and Cucumbers can easily and safely be eradicated by means of Abol White Fly Compound. No apparatus needed. Simply pour the Compound down the centre path of the House at the rate of 2½ fluid ozs. to 1,000 cubic feet of space.

Sold in round tins as under. When reckoning quantity required allow ¼ pint for each 2,000 cubic feet.

Size	Price	Postage
¼ pint	1/-	6d.
½ pint	1/9	6d.
Pint	3/-	9d.
Quart	5/-	9d.
½ gallon	8/-	1/3
Gallon	15/-	2/6

Of all Nurserymen, Seedsmen, Florists, Ironmongers, Chemists and Stores. Abol Limited, 9, Beltring, Paddock Wood, Kent.

Write for descriptive Folder.

**Abol**  
**White Fly Compound**

Please mention THE GARDEN when writing.





VOL. LXXXIX.—No. 2804.

Price Threepence. Yearly Subscription, Inland, 17s. 4d.; Foreign, 17s. 4d. Registered at the General Post Office as a Newspaper and for Canadian Magazine Post.  
 Editorial Offices: 20, TAVISTOCK STREET, COVENT GARDEN, W.C.2.  
 Offices for Advertisements: 8-11, SOUTHAMPTON STREET, STRAND, W.C.2.  
 Entered as Second-class Matter at the New York, N.Y., Post Office.

AUGUST 15, 1925

## A REQUEST

I HAVE received a letter from an old and valued subscriber to *THE GARDEN*, and one who often sends in extremely valuable contributions to the paper. In it he says: "I know that a letter (in *THE GARDEN*) from those possessing exceptional gardens would give me infinite pleasure, besides helping one to grow plants at present unknown."

I have written several times before on the subject of co-operation between a horticultural paper, like *THE GARDEN*, and its readers, and I feel that an editorial staff cannot do better than try to explain that one of its main uses is to act as a clearing house for all information dealing with every imaginable class of gardening subject. We try to cater for every class of gardener, from the specialist to the tyro, and we believe that we succeed, but there is always more that can be done.

However good and authoritative an article may be, it can never be said to finish a subject, and there is no doubt that there is more knowledge, infinitely more, locked up in the heads of gardeners throughout the British Isles than has ever appeared in print. It is the duty of an editorial staff to tap this knowledge and issue it in the most suitable form. Our difficulty is in getting gardeners to write. I suspect that they are a shy race, but for the common weal this shyness should be overcome. In the future we hope to increase our Correspondence and Notes of the Week pages without lessening the importance of our main articles. This, however, is impossible without the co-operation of our readers, for we are proud to say that every note in these pages has come, unsolicited, from our readers. It is only fair to state that these must contain something of interest to the gardener to make them worth publishing, but there is so much to be learnt, even about the commonest plants in the garden, that this presents no difficulty.

The letter from which I have quoted deals with rare plants, such as may not interest every gardener, but there is room in our pages for information about everything, and it makes no difference whether the note is about some slight—and successful—change in the method of growing cabbages or some mention of a new or rare plant. There are plenty of species and varieties in this country to please everybody. What is usually lacking is knowledge: knowledge of habit, knowledge of growth, knowledge of their whims, knowledge of their increase. It is often this knowledge which some particular gardener possesses and which should be shared with the general gardening public. I ask every reader to think carefully whether he has not something of interest for all gardeners. If he, or she, has succeeded with a difficult plant, found an improvement in the cultivation or propagation

of a particular plant, evolved a new and successful colour scheme, utilised the ground at his disposal in a novel way, and so on, let him—or her—send in a note to *THE GARDEN* about it.

## RUBUS QUINQUEFLORUS

Some time ago I mentioned this most excellent species of raspberry which comes from China. It is certainly one of the best of the white stemmed Rubi, for it is graceful in growth, is not given violently to suckering, has a pretty flower and a most excellent fruit. This is golden in colour and although inclined to be rather tart, has a most pleasant, fresh flavour. An added advantage has just come to my notice. The ordinary raspberry is much affected by damp, and all growers, whether private or commercial, know the deterioration that takes place in the fruit after heavy rain. This is not so with the fruit of *Rubus quinqueflorus*. Towards the end of last week I raided a large bush of this "Chinese raspberry" and even after heavy rain found the quality and flavour unimpaired. In its present form it is hardly a raspberry to be grown on a commercial scale, as the crop is not heavy for the size of the plant, but here is, surely, a case for the hybridist? A cross between this and a garden variety might give us perfection in bush fruit. The best plant of this species that I have seen is growing in the open, but is slightly shaded on the west. This specimen is over 8ft. high, with a great central pyramid and numerous canes curling over. Although prickly, the canes are not so thick that one cannot reach the fruit. There is no reason why this raspberry should not grow on a wall.

There are, of course, dozens of Chinese rubi. I have forgotten how many new species Mr. Wilson alone found in Hupeh and Szechuan—and most of them are rapacious frauds, which are best left severely alone, but there are a few exceptions, among them *R. bambusarum* and *R. quinqueflorus*. As an economic plant I should imagine that the former was of little use, but the latter has distinct possibilities.

E. H. M. C.

## AMONG THE ARTICLES IN OUR NEXT ISSUE WILL BE:

- THE STEWARTIAS, by A. Osborn.
- THE PROFITABLE UTILISATION OF GLASSHOUSES, by Sidney P. Wells.
- INTERESTING PLANTS, by F. A. Hampton.
- BENEFICIAL INSECTS, by M. L. Brooke.



# ANDROSACES

WITH THEIR WOOLLY COVERED AND TUFTED LEAVES SITTING TIGHT IN THE CREVICES OF A STEEP ROCKERY AND THEIR DAINY AND GRACEFUL FLOWERS, THE ROCK JASMINES ARE AMONG THE MOST CHARMING OF THE ALPINES.

**M**OST rock garden enthusiasts are well acquainted with this beautiful family, either in theory or practice.

Androsaces are, however, too often left out of collections owing to their many objections to captivity, and yet, even the most difficult members can be mastered sooner or later by the keenest perseverance, and it is in these instances where the real joy and love of alpine lurk. I recall to memory flowering *A. glacialis* for the first time. I grew a couple of specimens—in my own opinion, perfectly. They were smothered in dainty, clear pink blossoms, and I was never tired of feasting my eyes upon them. I could see exceptional beauty in them, and considered I was well rewarded for the trouble I had had in keeping them going. I really believe it to be as difficult as *Eritrichium nanum*. A month from

when they were at their best, after a fast decline, both plants were dead, having passed away for no reason whatever. Many other species and varieties are, however, more amiable and of stronger constitution, and can be grown moderately easily, and yet give us the daintiest of flowers. Many are swathed in short silky hair: these are the most liable to succumb to winter wet. Others are shiny and hairless, usually the easiest to manage. A pane of glass over the most tender subjects will often save them, although, if it is possible to do without such means, I should prefer it. *A. helvetica* is one of the small woolly types, and is one that is often not attempted owing to its minuteness and tendency to become a victim to fogs and rain; but, nevertheless, I know of one particular 3in. cushion that existed unblemished for ten years in an unprotected position in the crevice of a limestone boulder. During those years, the Great War was taking place, so that *helvetica* had more or less to take care of itself, and this it did to be sure, for up to the present year it was almost as good as ever. Grown as specimens for the alpine house, androsaces are all good and interesting, with much more opportunity to make their name good. I give below a generous selection and description of some of the best of the race:

**ANDROSACE SARMENTOSA.**—This is one of the most popular species, being one of the heartiest and most robust growers. It forms a mat of silky rosettes, each from one to two inches across, and these provide abundant pale pink flowers, carried in heads on 3in. or 4in. stems, in May. After flowering, numerous runners are produced, terminating in a fresh rosette of leaves; these lie close to the soil and soon take root with the greatest freedom, after which they may be either left to increase the mat, or be taken away to start a new colony. Treatment is of the simplest, giving it an open, airy position on some well drained gritty soil, preferably on the slope. A sprinkle of pure limestone chips around the collar of the plant will,

no doubt, be beneficial to it. From *sarmentosa* we have the equally pleasing variety known as var. *Chumbyi*, which differs but very little—chiefly by its flowers being a clear bright rose. Cultural details as for the type hold good.

**ANDROSACE STRIGILLOSA.**—This is generally the plant that is sold as *A. foliosa*, with a character and habit quite unlike most of its group. In any good, well drained soil, it presents no difficulty in growing; far from it. It is of a robust thriving habit, making sturdy growth, 6ins. high, with large oval leaves which clothe the stout red stems. In June, we see its large round heads of lilac blossoms on stalks 3ins. or 4ins. high, which arise from within the centre of the cluster the top leaves form. A sunny yet moderately cool aspect will be found to satisfy its requirements.

**ANDROSACE LACTEA.**—A most delightful, dainty and free-flowering species, best suited for the moraine or scree, particularly limestone, since it is native to the limestone Alps. Granite or other stone chippings mixed with light sandy soil will, however, serve its purpose well. The leaves are long, narrow and sharp-pointed, and are arranged to form a neat, dense rosette. Flowers, large and white, are borne singly at the tips of the slender, many-branching stems, and have a fairly continuous season, commencing when the stems are 2ins. or 3ins. high, until they are 6ins. or even 8ins. During this time innumerable flowers are produced. It sets seed readily, and may be easily increased in that way. Very similar to this plant is the attractive *A. lactiflora*, the disadvantage of this being that it is only biennial at the most, and very often annual.

**ANDROSACE COCCINEA.**—Although this plant is more or less biennial, its inclusion among choice alpine should not be despised, as its flowers are of a wonderful scarlet hue seldom seen in alpine, and by saving its seeds a succession

of plants may be maintained from time to time. Gritty loam suits it well, and rosettes of a leathern texture are formed, the individual leaves being strap-shaped and coming suddenly to a point. For the hybridist it is a species worth knowing.

**ANDROSACE PYRENAICA.**—One of the smaller species, covered with the finest of short hairs, and forms compact hummocks of tiny rosettes of wee narrow leaves. It is one of the easiest to do of the small types, and asks for a deep crevice in the face of a rock that may be filled with some sandy and gritty soil. Its flowers are borne, in May or thereabouts, singly, on short stems, and are white and of a starry formation. As the name suggests, the central Pyrenees is its native habitat.

**ANDROSACE IMBRICATA** requires "growing" to bring it to perfection, as it is not quite so easily established in cultivation and strongly resents excessive moisture in winter. Overhead wet will most likely cause it to die, so we must fall back



**A. SARMENTOSA, ONE OF THE MOST ROBUST MEMBERS OF THE FAMILY.**



on artificial protection—provided by tilting a pane of glass over it. It enjoys a hot, sunny aspect, wedged firmly between rocks that do not contain lime, as it is certainly natural on granite in the high Alps. It makes dense cushions of small rosettes of a handsome, silvery whiteness, and snows itself over with large white blossoms which are almost stemless. It would be, no doubt, better suited by alpine house culture, where the conditions can be made more to its liking. Grown in pans, wedged, and slightly raised between chunks of granite in a gritty, well drained mixture would suffice, and water need never hang about its foliage. Little or no water would bring it through our darkest days.

ANDROSACE HELVETICA resembles the two preceding species in habit, having large white stemless flowers sitting on firm downy cushions of miniature green foliage. It is one of the most popular of its section (aretia), and desires a deep sunny crevice in a very porous soil that contains plenty of limestone chips or similar substitute. Its distribution is wide, and it is abundant at high elevations on the limestone cliffs. *A. helvetica* also makes a good specimen for the alpine house and there it may enjoy a longer life more safely, as too much wet when resting is unwelcome.

ANDROSACE GLACIALIS is undoubtedly a plant for the specialist and for the lover of choice and difficult alpine, as it needs a good deal of care and attention if it is to submit to our cultivation; even then it may—or, at least, usually does—promptly die, so that when one does succeed in making it happy, it is a triumph and a great joy. Although it may bear large and dainty clear rosy blossoms, almost stemless, on cushions of grey-green foliage, its real charm and attractiveness, to me, lie in its culture. Other species are often quite as pretty to look upon and may be far easier to grow. The best place to grow it would be the moraine, where it may be given liberal underground water in the summer and be left as dry in the winter. It is calcifuge, and a mixture of sandy vegetable soil with abundant granite chips would be found as suitable as any; or slate chippings may also assist, in view of the fact that it is often found on that material. It has a wide distribution in the European Alps, occurring at high altitudes.

ANDROSACE CYLINDRICA haunts high places in the Pyrenees, but it is not common by any means. It forms mats of stout rosettes of long, broad leaves covered with short hairs; these rosettes usually terminate old stems that are furnished below with the brown dry leaves of years previous. Numerous flowers are produced from the leaf-axils, but are rather starry and not too good a white, unless forms vary considerably, which I have not seen. Too much overhead wet in winter is fatal, so that the necessary precautions should be taken. It desires a sunny, deep and well drained limestone crevice.

Similar to this plant are *A. pubescens* and *A. hirtella*. Although distinct, they are possessed of hairy leaves and small white flowers, and may be given treatment likewise.

ANDROSACE SPINULIFERA is a quite rare type from China and as uncommon in its mode of life. During the winter, it simply has the appearance of a compact spiny house-leek,



THE DAINTY AND FREE FLOWERING *A. LACTEA*.



ONE OF THE NEAT COMPACT HUMMOCKS OF *A. PYRENAICA*.

a tight incurved rosette an inch across, from the centre of which, in spring, it unfolds long oval leaves 3ins. or 4ins. in length, and eventually throws up tall sturdy flower stems with solid heads of deep pink blossoms. A cool position in leaf-mould, loam and sand will suit it well, and it is deserving of a choice position.

F. BARKER.

(To be continued.)



## CONSERVATORY AND GREENHOUSE

**SALPIGLOSSIS SINUATA** in many beautiful varieties is unique for conservatory decoration, well grown plants attaining a height of 3ft. to 4ft. Compared with other annuals used for this purpose they require a long growing season, and seed should be sown in a cool greenhouse or cold frame from the middle of July up to the beginning of August. In the immediate neighbourhood of London and other large towns where winter light is at a minimum the longer growing season is very essential. This beautiful plant is not one of the easiest to grow successfully in pots. It is advisable to sow the seed in a cool greenhouse. When the seedlings are large enough, they should be pricked off singly into small pots, affording water very carefully and shading from bright sunshine until they are well established. When well rooted they may be given a shift into large sixty-sized pots, in which size they should pass the winter, keeping them well up to the roof glass in a cool, airy greenhouse and giving water very carefully to the roots during this time, as they are apt to suffer from damp. Early in the New Year they should have a shift into 6in. pots, observing the same care in watering until they are well established.

**CALCEOLARIAS** of the herbaceous section can be sown during July or early in August. A light rich compost may be used for seed sowing. The very fine seed should be carefully distributed over the surface, and it is well to cover with the merest sprinkling of sand. Cover the seed pan with a piece of glass and keep shaded until germination takes place. When fit to handle, the seedlings can be pricked off into pans or shallow boxes, and when they have attained some size they may be potted up into small pots, using a light compost at this early stage. During subsequent pottings use a heavier compost. *Calceolarias* during all stages of their cultivation should be grown perfectly cool with plenty of atmospheric moisture. During the winter they succeed in low pits or frames that are just kept free from frost. They are very subject to attacks of

green fly, which must be prevented by frequent light fumigations. The light and elegant hybrids of *Calceolaria cana* are so dainty and charming that they are worthy of more general cultivation. As they are available, cuttings should be secured of the shrubby varieties, as represented by *CC. Clibrani*, *Allardii*, *integrifolia*, *Burbidgei*, *angustifolia* and *alba*, young growing shoots of them all being essential for successful propagation. They can all be successfully rooted in a close case in a cool greenhouse.

**CYCLAMENS.**—Seed is usually sown about the middle of August, but in the immediate neighbourhood of London it is best to sow about a month earlier, for, owing to the lack of winter light, they make very little progress during the winter months. As cyclamen seed is usually very irregular in germination, it should be sown very thinly; this allows for the more forward plants being removed without unduly disturbing the others. The seed pans should be stood in a house with a temperature of 55° to 60°. When large enough to handle, the seedlings should be pricked off into pans or boxes, using at this stage a light rich compost to which some old mortar rubble should be added. The young plants may be wintered in the pans or may be placed singly in thumb pots. In any case they should be kept well up to the roof glass, and should be given water very carefully at the roots, as they are apt to suffer from overwatering during the dull days. Early in the New Year they should be ready for a shift into larger pots. Cyclamens raised from seed last year should now be placed in their flowering pots, which may be 5ins. or 6ins. in size, according to the strength of the plants. The compost should consist of a good medium loam, with the addition of a little leaf-soil and lime rubble, which may with advantage take the place of sand; a 6in. potful of bone-meal may also be added to every bushel of soil. Cyclamens enjoy cool and moist atmospheric conditions, and are best grown in low pits or frames. It is an advantage if the lights can be removed at night, as they derive much benefit from dews.

**BULBS FOR FORCING AND GREENHOUSE WORK.**—If the best results are to be obtained, freesias, Roman hyacinths and paper white narcissi should be potted up some time during August or at the latest during early September. Thus, if not already done, there should be no delay in placing orders. *Ixias* in many beautiful varieties should be much more generally grown for greenhouse decoration; also *sparaxis*, *babanias*, *Allium neapolitanum*, *Ornithogalum arabicum*, as well as the many beautiful varieties of *gladioli* included in the *nanus* and *ramosus* sections. *Lachenalias* are also very much neglected, and are deserving of more general cultivation; also the beautiful varieties of *Tritonia crocata*, the variety *Orange King* being very beautiful and lasting well when cut. The many beautiful species and varieties of bulbous iris are also very charming when grown in pots and pans, being specially useful for the small unheated greenhouse. *Veltheimia viridifolia* and *Bravoa geminiflora* are also very useful for the cool greenhouse. There are, however, many other useful and interesting bulbous plants that should be more generally used for the greenhouse, which I hope to deal with in due course.

**PELARGONIUMS** of the show and regal types that have finished flowering should be stood outdoors in cold frames or at the bottom of a sunny wall. They require very little water at this time, as it is important to get the wood well ripened for the cuttings which should be secured towards the end of August. Pelargoniums of the zonal type that are required for winter flowering should be stood outdoors in a warm, sunny position, as it is very essential that the wood be well ripened before housing them for the winter. In such a position they require strict attention as regards watering and feeding.

**HYDRANGEAS.**—As they are available, good strong cuttings of the many beautiful varieties of *Hydrangea Hortensia* should be secured. The cuttings are best inserted singly in small pots. It is not necessary to cut them at a joint, as roots are emitted freely from any part of the stem. They root readily in a close case in an ordinary greenhouse. J. COUTTS.

## LUPINS AND DELPHINIUMS

**THE** name lupinus, derived from lupus, meaning a wolf, was originally given to the plant because it was considered to be a voracious feeder which rapidly depleted the soil of the food stored therein. The wild species of lupin are often found growing on poor sandy soil, where, by means of bacteria which live in little nodules on the roots, they gather nitrogen from the air circulating in the soil, storing it up for the use of future crops. In Germany and, indeed, in many other parts of the Continent, lupins are often sown in poor sandy soils where little else would grow, and are then ploughed or dug in with a view to enriching the land. There is probably no race of plants, with the possible exception of delphiniums, which have been so improved during the last few years, and when it is realised that they are inexpensive to buy, will last for many years, and provide masses of colour ranging from the deeper shades to the softest colours, the demand for them will increase still further. The genus lupin

comprises over ninety different species, and while in Europe most of these are annuals, in America, curiously enough, they are mostly perennials.

Among the species well worth growing are the following: *Lupinus Hartwegii*, a Mexican perennial which is usually grown as an annual in the gardens in this country. During the period between July and October the plant grows to a height of about 2½ft., and bears quantities of beautiful blue flowers with creamy white keels. *L. Hartwegii celestinus* is a lovely variety with pale blue flowers, and the best plan is to sow the seeds in the border during May or early June, thinning the young plants out to 9ins. or 10ins. apart. As soon as they show signs of blooming, any with rose in their colouring should be pulled up, as these are not nearly so attractive as the pure blue flowers.

*L. mutabilis*, or the changeable-flowered lupin, is a very fragrant half-hardy evergreen plant which, however, is generally treated as a hardy annual. A native of South America, it grows to

a height of 3ft. to 5ft., bearing flowers from June to August, varying from white mixed with blue to pink mixed with cream. *L. Cruckshanksii*, or Mr. Cruckshanks' lupin, was found growing upon the Peruvian Andes near the verge of perpetual snow. It is considered by some authorities to be a variety of *L. mutabilis*, blooming in July with bluish purple flowers, the centre of which is deep yellow with wings of blue or lilac. This is a remarkably handsome plant, and it was growing to perfection during the summer of 1923 in Mr. P. D. Williams' beautiful garden at Lanarth, near St. Keverne, Cornwall, and later in Mr. Musgrave's garden at Hascombe Place, near Godalming.

Seeds of these annual lupins sown any time during May or the first week of June will bloom in the late summer.

The lupins growing in our gardens are for the most part the progeny of the perennial species, *L. polyphyllus*, which bears dark blue flowers and is a native of California. There is also a





A WELL-FLOWERED CLUMP.

white form which is very effective. A new race of lupins introduced during the last few years is the result of crossing this species with *L. arboreus*, the true tree lupin, which is a native of California, with an evergreen shrubby type of growth. It grows to a height of about 3ft. in California, but in those parts of our country where the climate is at all mild and favourable large bushes are often formed several feet in height. These new hybrids show some of the characteristics of both their parents, are herbaceous in character and die down to the ground each winter. The colouring of many varieties is beautiful, and a border of these flowers forms a picture which is long remembered. The seed may be obtained and sown in the open ground in May, June or July, and the plants moved to their permanent quarters as soon as possible in the autumn. Plants can now be obtained so cheaply, and there is always such an advantage in planting clumps of the same colour, that the purchase of plants is advised whenever possible, and if these are ordered in good time for early autumn or spring delivery, beautiful results will be seen next summer. Individual nurserymen include innumerable varieties in their lists of herbaceous plants, but the following are recommended for any soil and garden: Nellie, which was a cross between *L. arboreus* and *L. polyphyllus*

roseus, has white flowers tinted rosy mauve. Felicity is rich deep mauve, and a clump of this looks remarkably well at the back of a herbaceous border. Queen of the West is a variety eminently suitable for an amateur's garden, and the young flowers first open a soft yellow, suffused with mauve, and then change in the older flowers to deep wistaria. Milly has flowers of deep lilac, and is certain to be in especial favour where ladies undertake the planning of the garden. The soft pink Cross-Roads, the shell pink Tunic and the salmon pink Mayflower are three of the best pink varieties yet raised. Artist is a delicate blue, while a new variety called Countess of March opens a pure white and then gradually changes to wistaria mauve. May Princess is deep purple, and for those who prefer red shades, Downer's Delight, or its cheaper companion, Fire-Fly, will be successful. The last variety when planted in conjunction with blue delphiniums always looks well. Sunshine remains the best and richest yellow in this section, and the glow of this flower makes it very valuable for effect in the border. In addition to the delightful old species, *L. arboreus*, with its sweetly fragrant flowers, the new variety Light of Loddon should be included in all gardens. This is one of the best plants raised in recent years.

In most gardens delphiniums may be used to advantage, and these plants have been so improved during the last few years that a few up-to-date varieties should be obtained each year. Nora Ferguson is one of the finest and bears semi-double flowers on long spikes 4ft. in length. The individual flowers are powder blue, flaked or flushed with mauve, and as this variety has a very fibrous type of root, it is especially suitable for

use in the average amateur's garden. Some of the single sorts are very lovely, and the sky blue Mrs. Crisp is one of the best. For those who like bright blue, Pannonia can be recommended, while in the deep rich purples an old variety The Alake can still hold its own. Two new varieties, the flowers of which might be described as an exquisite blending of mauve and powder blue, but which are still somewhat expensive, are Mrs. R. W. Ascroft and Peggy Wiseman. For the back of wide herbaceous borders the rosy lavender Shah, with its dark eye, is very handsome and grows to a good height. Where the taller varieties are not suitable, clumps of the belladonna section should be planted, as their branching habit is of especial value for providing spikes of flower for cutting purposes. The very soft blue Musis Sacrum, the dark blue Lamartine and the sky blue Belladonna semi-plena are three of the best.

ROBERT W. ASCROFT.



A HANDSOME BORDER OF DELPHINIUMS

## SERVICE FOR READERS

Though so many subjects are dealt with in each issue of THE GARDEN, it must constantly happen that readers seek information which is not immediately available. In such circumstances they should make use of our new Service Department. Through its medium each reader's own particular enquiry can be dealt with. No matter what the question is, whether advice is sought as to—

RESTOCKING A GARDEN, COLOUR SCHEMES FOR GARDENS, THE BEST PLANTS FOR CERTAIN SITUATIONS, WHERE TO OBTAIN NEW AND RARE PLANTS, INSECT PESTS, NAMING OF PLANTS, AND THE HUNDRED AND ONE OTHER DETAILS RELATING TO THE GARDEN—

there is always information available from a staff of expert contributors and consultants; and there is no charge for this. It is one of the additional means of Service which THE GARDEN is glad to render to its readers.

All communications should be addressed to the Service Department, THE GARDEN, 20, Tavistock Street, Covent Garden, London, W.C.2.



## NOTES OF THE WEEK

### CROCUS ZONATUS.

A VERY delightful autumn-flowering crocus, which can be recommended with every confidence for planting as soon as the bulbs can be purchased, if wanted to bloom this season, is that named *Crocus zonatus*, so called from the bright yellow bearded throat, which is zone-like in appearance. Its main coloration is composed of rosy lilac, with purple veining, and with a buff tube and the yellow throat already alluded to. The flowers, although small as compared with the great Dutch spring crocuses, are of a good size, and a clump when in flower in September or October is charming near the front of the border or rock garden, while for those who can afford to purchase it by the hundred a free planting in thin grass is lovely at that season. Corms or "bulbs" are not expensive and should, if possible, be planted from the end of July to the middle of August, when they can usually be obtained from bulb dealers, some of whom issue separate lists of such bulbs. A sunny, rather sheltered place in light soil is necessary for *C. zonatus*, and the proper depth at which to plant is about 2 ins.—S. ARNOTT.

### ROSEMARY.

THIS hardy evergreen shrub is found in many old-fashioned gardens, and was once held in high favour for its evergreen foliage and fragrance, both of which remain so long after the sprigs are gathered as to be thought almost immutable. Hence Spenser called it "the cheerful rosemarie." It was from its credited ability to strengthen the memory that the plant is said to have been regarded as the symbol of remembrance. More than any other old-time plant it brings with it an atmosphere of mediævalism, and that not merely from Shakespeare's allusion. In Elizabeth's reign was published a song book called "A Handefull of Pleasant Delites" or "A Nosegaie alwaies sweet for lovers to send for tokens of love at New Year's tide or for fairings," and therein was the verse:

"Rosemarie is for remembrance  
Between us daie and nighte,  
Wishing that I maie alwaies have  
You present in my sighte."

Planted against a wall and left long undisturbed, rosemary will attain a great height and size, with thick, woody stalks from which lutes, carpenters' rules, etc., were once made. The uses of this fragrant herb were many in olden days. It was used to ward off infection, as the chief ingredient in healing lotions and toilet waters for milady's boudoir, to strew on church floors at Christmas-time, and a sprig under a sleeper's pillow was said to induce refreshing repose. At weddings a spray of rosemary, as the emblem of constancy, was placed in the wine of the loving-cup. Contrary to this theory is the still popular idea that where rosemary flourishes the lady of the house reigns supreme. It is symbolical of friendship and remembrance, perhaps because its delicate haunting perfume is unique and must inevitably awaken old associations with pleasant gardens gay with humble blossoms.

The medicinal uses of rosemary are so many that, says an old herbalist, "you might as well be tyred in the reading as I in the writing if I set them down." The plant was

once associated with sea spray (hence its name, *Ros marinus*), and flourishes best near the sea coast. It is a native of Mediterranean lands, and the French and Italian peasantry have woven around the plant many charming legends. Like the attributes for which it stands—loyalty, remembrance and friendship—rosemary puts forth its sweetest savour when sheltered from cold winds of neglect.—OSWESTRY.

### STERILISATION BY CRESOL.

CRESOL is familiar to all as a black coal-tar disinfectant which when mixed with water gives a white, milk-like emulsion. It is sold under various proprietary names, the concentrate in all cases varying but little from a kind of standard strength; such liquids are in constant use in public halls,

simply wet the soil. Cresol must not be used where there are plants. We find that certain plants and shrubs will survive the ordeal when dormant, as in winter, but no hard and fast rule can be determined, hence the above advice. A taint of it in winter-wash liquors—five times the above dilution—does no harm to dormant fruit trees and is decidedly a deterrent to bird pests. Turf treated with cresol is wireworm-free. These are a few other uses.

Soil or land must not come into immediate use after cresol is employed. The period which may elapse varies greatly, according to the weather mostly, but a safe period is a month; warm weather frees the ground much quicker than any other of our special weather-samples, but yet an application in warm dry weather is more effective than any other application.—LANARKSHIRE.

### MIMULUS BARTONIANUS.

FOR growing in cool and perhaps slightly moist positions the various forms of *mimulus* are ideal subjects, and the plant under notice is quite distinct from the majority. It was raised by Mr. H. O. Barton of Co. Antrim, and the parentage is stated to be *M. Lewisii* and *M. cardinalis*. The foliage is dark green, and the flowers, some 2 ins. across, are bright rosy cerise with a yellow throat. It began to bloom early in June, and, at the time of writing the plants are a mass of flower, such a state of affairs will continue until early autumn, when the plant gradually dies down. A stock can be raised by means of cuttings in August and September, and they should occupy a cold frame for the winter.

I think this plant is fairly hardy, but last winter several examples were lost, perhaps owing to the sodden condition of the ground when the roots were dormant. However, it is very attractive and distinct and is worthy of a trial.—T. W. B.

### NOTES FROM READING.

THERE are two *dianthus* with yellow flowers out now. One has its pistil blue, the other white. This is the only difference I can see. One is labelled "aridus" the other "Knappii." Can anyone tell me the name of a *dianthus* with white flowers, very much fringed, with the scent of a *Daphne Cneorum*, though weaker, and foliage as prickly as *Acantholimon venustum*?

*Dianthus Donizetti* is a fine colour and seeds abundantly. *D. Forrestii* seems to be a hybrid with *barbatus* blood in it. The colour is most attractive. A tree of *Magnolia salicifolia* 15 ft. high flowered fairly in March, but now is covered with blooms for two-thirds of its height. *Catalpa bignonioides* 25 ft. high and 30 ft. through has been a marvel of beauty. Its flower clusters are finer than those of the horse chestnut and are deliciously scented. The leaves are particularly soft and velvety. Why such a treasure is so comparatively rare is a mystery. The tree is extremely shapely and gives a most grateful shade in hot weather. *Eucryphia pinnatifolia*, also 15 ft. high, is covered with its white blossoms, to which the stamens lend an additional charm. *Thalictrum dipterocarpum*, showing its head above the dwarf shrubs among which it is growing, is singularly graceful. Of gentians, *Lagodechiana*, *Freyniana* and *Purdomi* are the best here.



ROSEMARY, A FINE OLD-FASHIONED GARDEN SHRUB.

lavatories, etc., so that, we venture to say, cresol can be obtained in all towns and villages almost without exception.

Experiment goes to prove that cresol can be used as a steriliser on vacant land. These experiments were started several years before the war, and by 1914 it was recognised that cresol was useful in that search of ours for something to kill soil pests. Only lately have we ourselves repeated these experiments, and we wish to point out to others the possibilities of the substance.

Cresol used at a dilution of one dessert-spoonful per gallon of water kills cabbage maggot, carrot maggot, white grubs, leather-jackets, wireworms and other soil pests. Actual contact, even, is not required, the carbolic fumes being deadly enough if near the pest; but every effort must be made to impregnate the ground, to moisten it to a depth of some 6 ins. This is most easily done at digging; no other action is required—



There are many of the type of cruciata all much alike but with many different names all hailing from various botanic gardens, but none corresponding to the prints of them in the *Botanical Magazine*. *Omphalodes Luciliae*, which used to be the show plant of the garden, is once more looking happy and is covered with bloom. In a shady corner there are growing happily together *Wahlenbergia hederacea*, *Linnaea borealis*, *Epigaea repens*, *Shortia galacifolia*, *Mitraria coccinea*, *Philesia buxifolia*, *Gentiana pyrenaica*, *Sisyrinchium filifolium*, *Pyrola rotundifolia*. In a hot border, which has a glass over it in winter, there are in flower now *Diplarrhena Moræa*, *Cypella Herbertii*, *Hippeastrum brachyandrum*, *Gerbera Jamesoni*, *Dianella cœrulea*, *Alstroemeria hæmantha rosea* and *A. pelegrina*. *Pasithea cœrulea* and *Pentstemon puniceus* are just over. *P. cordifolius* is just beginning to flower. *Anemonopsis macrophylla* and *Deinanthæ cœrulea* are at their best, growing in a shady peat border. *Gaultheria trichophylla* has yielded a good crop of its blue berries, and we are collecting the yellow fruits of *Leucopogon Fraseri*. *Polemonium confertum* is flowering for the second time. The donor finds it an easy doer which rapidly increases in size and admits of division. We envy him, but are most thankful to have the plant

and then alighted on the lawn, revelling in the hot sun. He took it up again in his hands and put it on a soft cushion of a saxifrage on the rockery and left it there, and we have seen it no more. There are no cats in the garden.—A. C. BARTHOLOMEW.

#### THE HERBACEOUS PEONY IN CANADA.

ONE evening early in July the telephone rang, and taking down the receiver I was told that Montreal was speaking. I listened, and the familiar voice of a friend said: "My peonies are in blossom, will you not come up on to-morrow night's train and see them?" Except that I love all flowers, I have no particular penchant for peonies, but I have heard something about the peony in Canada and decided that this was a good chance to check up the story by personal observation.

I went, I saw, I returned amazed, charmed, enraptured. Canada can grow peonies unsurpassed the world over. I saw all the standard varieties of France, England and America flaunting their blossoms perfect in colour and form in I know not how many tens of thousands. I saw more than twenty thousand blooms of the superb Marie Lemoine, queen of all white-flowered peonies. From

fine shrub, disappears completely in winter and offers no obstruction in the clearing of city streets and side walks.

Christened "Lady of the Snows" by Kipling, Canada right worthily is the "Land of the Peony Rose."—E. H. WILSON, *Arnold Arboretum*.

#### PLANTS IN NORTHERN AFRICA.

OUR first expedition to find plants in North Africa was to the plateau of Ras Afour, near Maruia, on the borders of Algeria and Morocco. One of our objects was to find the hybrid between *Quercus Mirbeckii* and *Q. Ilex*, which we were told was there, but we did not find it. We saw great forests of scrub evergreen oak and at the top of the plateau some picturesque veterans of former great forests, but no good trees and only this evergreen oak. The plateau is 5,000ft. high and had lately been covered with snow. In fact, we still found a patch of snow in a hollow, though the day was very hot.

Our disappointment in not finding the trees we wanted was made up for by seeing sheets of a lovely salmon coloured asphodel (*Asphodelus repens*, *Pouret*), growing flat on the stony calcareous soil, as if thousands of large asphodel flowers of a brilliant pink had been stuck in bunches among the stones. This gem has the most delicious perfume.



A FIELD OF WAVING WHITE PLUMES OF PEONY MARIE LEMOINE.

again. The variety *mellitum* seems equally scarce. *Polygala calcarea* is still in full flower. On the Berkshire downs it covers many square yards, growing close to one of the patches of *Anemone Pulsatilla*. A generous friend gave me a splendid plant of *Campanula Zoysii* in full bloom. For half a day it was the glory of the garden, then slugs or snails endowed with some uncanny sense found it and left but a remnant. *Paliurus Spina-Christi* always flowers in profusion but never sets seeds. We have only one plant. Let no one who has a microscope deny himself the pleasure of discovering the beauty of *Garidella Nigellastrum*.

I have left to the last by far the most lovely occupant seen in the garden lately, a baby goldfinch, which allowed the gardener to pick it up in his hands and stroke its back. It seemed to like his attentions, though it would not drink the water or eat the worm he offered it, but it spread its beautiful wings and showed the wonderful gold of its under feathers. He placed it on a cherry tree, and from there it flew some roys.

these fields some ten thousand blossoms had been cut and, through the patriotic philanthropy of far-sighted men, sent to England to be placed on exhibition at Wembley. If these travelled well the experiment would give English friends a glimpse of what daughter Canada can do in the growing of flowers. And the peony is not the only flower that flourishes to perfection in Canada. Far from it. But the peony has peculiar merits of immense value to Canadian gardens. The foliage is dark, lustrous and telling in effect, even after the flowers are past. In the winter the stems die down and the plant lies snug beneath the snowy mantle that covers the ground.

In Canada, for planting in city parks, edge of lawns, and in plats that abut on the street, the peony is perfect. A shrub of any sort would be injured, if not ruined, by the snow-plough passing over it or dumping snow on top, in fact there are laws forbidding the planting of shrubs in such places. The peony, which throughout the spring, summer and autumn has all the good qualities of a

All day we got whiffs of it as we hunted for other things among the dwarf oaks. I think, too, it should be hardy in England, as the winters at that height are long and very cold, but they get a tremendous ripening in summer.

On rocks in the shade we found a white form of *Narcissus bulbocodium* (*Corbularia monophylla*); this was growing in leaf-mould in crannies of the calcareous rocks. Quite close to it, but more in the open, *Crocus atlanticus* still had some of its lavender flowers, though it had nearly finished flowering.

On the way down, by the side of the road, in the hardest soil and schist rock, there were quantities of *Tulipa celsiana*, delicate yellow flowers flushed with a reddish-brown on the outside.

The whole of the slopes of the hills below the plateau are covered with a scrub, largely composed of rosemary, *Calycotone intermedia*, looking very like gorse in bloom, and smelling like it, too; *Cistus ladaniferus*, with the large crimson blotch on its petals, and the small, but delightful, *C. Clusii* neat little



green bushes covered with white helianthem-like flowers. Here and there was a fine form of *Lavendula Stoechas*, very compact and grey, with large light purple bracts, a really decorative plant.—LAWRENCE JOHNSTON.

#### SATAN'S SNUFF BOX.

ON an autumn morning, it is not uncommon for a gardener to find a lawn dotted with small, white, roundish, tuber-like plants, or puff-balls, although none of them was visible disfiguring the grass-plot on the previous day. The larger kinds are more seen during the autumn, growing in orchards near the roots of fruit trees, or in fields, being sometimes several feet in circumference. But in our country, rustics are apt to look upon all fungi which are not mushrooms as poisonous "toadstools," and, therefore, if they come across these monstrous puff-balls, often demolish them by crushing them under their feet. It is a pity, as they are perfectly innocuous when either handled or eaten.

These giant puff-balls, as they have been very properly designated, can hardly fail to be of some interest to any person who has the time and opportunity of studying closely plant life, as they are wont to exhibit an amazing rapidity of growth. Indeed, Carpenter, in his "Vegetable Physiology," goes so far as to say that "A large fungus of the puff-ball tribe has been seen to grow in one night from a minute speck to the size of a large gourd. No other living beings have powers of growth at all to be compared to this." Such prodigious increase in size in so small a time may well remind us of the description given in Scripture of the gourd which came up in a night and shaded Jonah.

Before any fungus of this kind becomes over-ripe its outer covering or rind looks like white kid, and the pulp inside, if examined, is found to be of a creamy whiteness and firm and fleshy. It is then very nice to eat if it is rightly cooked, tasting not unlike sweetbread. No one need fear to partake of it freely, for its size and globular shape make it impossible to mistake it for anything else. After having removed its outer skin,

slices of the pulp about  $\frac{1}{2}$  in. thick can be fried in butter and each slice may then be dipped in a beaten-up egg and sprinkled with breadcrumbs. Although there is a prejudice at home against puff-balls, yet in some countries they are commonly eaten, and one of the giant species is enough to satisfy the appetites of ten persons. When over-ripe



A GIANT PUFF-BALL.

the pulp is of a brownish colour and becomes dry and powdery, the powder consisting of spores interspersed with many fine filaments. Eventually the rind bursts and the spores, somewhat resembling grains of snuff, are emitted in the form of smoke. In former times there were among the peasantry

some who employed the powdery portion of the fungus as a remedy for stopping bleeding. Not long ago an old countrywoman in Kent related that when she was a girl and bled from the nose her mother took her to an orchard and, picking up from the ground a puff-ball, applied the powder from it to her nose with good effect. As regards the use of the fungus in surgery, there is good evidence that it has been applied by surgeons for centuries to arrest bleeding, with excellent results. Its spores have been dusted over bleeding surfaces, or pieces of its pulp plugged into deep bleeding wounds where the cut blood-vessels could not be reached to be ligatured. As the pulp is very soft and porous or spongiform, it makes an exceedingly comfortable surgical dressing, and wounds often heal under its application without the formation of a scar. But it ought, before being applied, to be heated in an oven, to kill any noxious germs it might harbour. Bee-keepers, now and again, when they wish to procure the produce of a hive without destroying the lives of the inmates, ignite the puff-balls and then expose the bees to the fumes which arise and have a stupefying effect upon the insects. Also, this method of quieting bees has been adopted in order to introduce alien bees. But it has the disadvantage of leaving a disagreeable odour, which hangs about the stock for some time and is much more troublesome and less effective than chloroform. Furthermore, veterinary surgeons have by means of such fumes been able to produce insensibility to pain in dogs requiring operative treatment.

Among the majority of the commonality there appears to be a strong feeling of loathing and contempt in respect to this particular fungus. In fact, in some parts of England it is popularly styled "Satan's snuff-box," and in Scotland the "de'il's sneeshin'-mill" (devil's snuff-box). But it ill deserves to have such opprobrious epithets applied to it, as I have endeavoured to show.

It is a valuable article of diet, possesses powerful styptic properties, and is a useful agent for narcotising certain animals.—E. K., *Gravesend*.

## NOTES ON STRAWBERRY CULTURE in the OPEN

OF all the so-termed "soft fruits," probably the strawberry is the most highly esteemed by all classes, rich and poor alike. In this article I will confine my notes to the cultivation of the strawberry for garden purposes, such as I have practised on successful lines for a number of years past. As a dessert fruit, the strawberry is in great demand as long as it is procurable; while for preserving, it is one of the most important of all fruits for the winter supply. This being a recognised fact, strawberries should be more extensively and better cultivated than they have been during the past few years.

No better time than the present can be selected to prepare for next season's supply, and any means of prolonging the supply of fruits, either by hastening or retarding, will, I have no doubt, be welcomed by your numerous readers. In many gardens, strawberries are grown in one position only, whereas by planting in various positions the season's supply may be extended by several weeks; in fact, nearly double the usual period. This is especially so in a season of heat and drought, like the present, providing the proper varieties and positions are

chosen. The earliest fruits are always produced from strong, sturdy, well grown plants.

Now is the time to secure runners, from plants put out last season, as these young plants always give the best and strongest runners. Prepare a sufficient number of the different varieties required, retaining several of the best on each parent plant. The first runner produced on the stolons being invariably the best. All the others should be removed, together with weeds that have accumulated during the fruiting period.

Clean a sufficient number of large 60-pots, place one crock in the bottom, fill moderately firmly with a well mixed compost of 3 parts loam, 1 part old mushroom-bed manure (or, failing that, decayed leaf-soil passed through a  $\frac{1}{2}$  in. sieve) and a slight dusting of old soot and fine bone-meal. See that the soil is in a moist condition for use.

Place the pots on the strawberry bed, in blocks together as much as possible, as this considerably helps forward the work both in the layering and daily sprinkling with a fine rose can; then place one strong runner in the centre of each pot.

I have found it advantageous to place small stones on the runners, in preference to pegs, to keep them in position till rooted. The stones conserve the moisture and assist in the formation of roots. Any of the short straw left on the beds may be placed round the layering pots, to prevent undue drying of the soil. Daily sprinklings must be given, preferably in the evenings, until the runners are established in the pots, any runners that are formed being immediately removed, thereby conserving the strength of the layers in the pots. Should the weather prove very dry, a good watering of the parent plants may be given, and help to keep down red spider, one of the worst enemies of the strawberry. During the time the plants are rooting in small pots, the various positions the plants are to occupy in their fruiting quarters should be prepared.

For the earliest supply, an open situation on a south border (say, 100 ft. in length, or more, according to requirements) should be prepared and a liberal quantity of well decayed manure worked in. The following plan I have adopted for some years with success: After the preparation of the soil and lightly treading



over and raking, the strongest plants are set out 14ins. apart all ways, placing them alternately. One point of vital importance when planting out strawberries is always to place the crowns facing south: also plant out the young stock as early in the season as possible, and before the plants become root-bound in the pots. By early planting and due attention to watering, etc., the plants start growing at once, and become well established in their new quarters, building up firm crowns—so essential to early fruiting—before the winter.

Returning to the south border plots. Half of these plants (100ft. run) are protected with lights during the winter and spring months, resting on a low skeleton frame made with odd pieces of quartering and boards.

Strawberries thus protected may be advanced several weeks. The others on the south border, not so protected, form a good succession. The varieties Royal Sovereign and The Duke will be found the best for this purpose. Use the hoe frequently, removing all runners as they appear. In the early spring, apply a sprinkling of lime and old soot, to keep down slugs; and, before placing short straw among the plants, apply a dressing of artificial manure. These early plants will well repay the extra attention given. Plenty of ventilation must be given during the flowering period, and a pampas plume may be used to fertilise the flowers. As soon as the blossoms fade, a good watering with tepid water may be given: in fact, cold water should never be used with these first early plants.

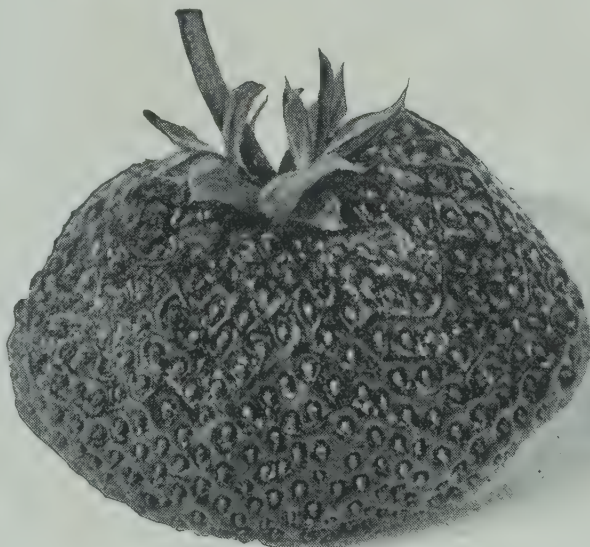
Support the fruits with small pieces of birch: those from old brooms are suitable. Close the lights fairly early in the day, well syringing the plants, until the fruits commence to colour, when syringing should cease and more air be admitted. Nets must be put on early, as birds are particularly troublesome with early fruits. Even in the frames a net must be thrown over the lights: it being necessary to have a considerable amount of air admitted as the fruits ripen, otherwise the flavour is impaired.

Having thus arranged for the early supply, the next, and more important, is the main crop, and for this one of the best positions, fully in the open, where full sun and air may reach the plants, should be chosen. The ground should be deeply dug and liberally manured, sufficient to carry the crop for two seasons. I consider the best results are obtained by keeping the plants two years only, as a third crop often results in a great number of small berries. For this main crop, the plan I adopt is as follows: After the ground has been thoroughly prepared, lightly trodden and raked over, the plants are set out in lines 30ins. apart and 12ins. from plant to plant. Always plant with the crowns facing south, as advised before. Attention must be given, with watering, hoeing, and the removal of any runners that may be formed, as recommended for the early crop. Plants thus treated will give a good crop of fine fruits next season.

After the first season's fruiting, and as soon as a sufficient stock of new layers have again been secured, all the alternate plants are cut out, finally leaving them all at 2ft. apart between the plants. The two-year old plants will then have room to develop and fill out the allotted space. It will at once be seen that, by close planting the first season, a full crop of fine fruit is secured.

Space should always be available for continuing this strawberry bed for the next season, so as to keep the main crop under one netting. A piece of ground may be cropped with early potatoes or peas, and thus be available in time for the planting of strawberries at the end of August or early in September.

The after-treatment of strawberries consists of removing promptly all runners and a considerable amount of the old foliage, together with all weeds and mulching; these should be burned. If the season has been dry, hoe the soil and give a thorough watering at the roots, to enable the plants to put forth new foliage and build up crowns before the winter months. A good dressing of decayed manure should be placed among



REARGUARD, A LATE-FRUITING VARIETY.

the plants and lightly pointed in with a fork. Strawberries should never be dug between with a spade, and only lightly with the fork. Some time early in March the beds should be again gone over, and any vacancies that occur made good. Gaps in strawberry beds are always an eyesore. A small handful of bone-meal at this time (March), lightly pointed in, and, later, a dressing of old soot when the flower spikes are visible, will help the old plants considerably; or a dressing of some approved artificial manure may be applied before strawing down the plants for the next crop.

A word regarding the netting of these main-crop strawberries may not be out of place, as birds play havoc with the fruits if not properly netted.

Good strong posts, at the corners and at intervals in the lines between, are desirable. Oak posts, 3ins. square and standing 3ft. out of the ground, are excellent to carry the straining wires over the bed, using smaller stakes at intervals in line, thus dividing the bed into a series of squares when the wires are fixed, whereon the net rests throughout the

season. Once the net is properly fixed there is no further trouble, ample room being secured to move freely under the net, and, to a certain extent, bird-proof. Half-inch wire netting should be employed, 18ins. deep all round the ground-line, and securely pegged down; on to this the net is secured, one place at the corner being used for going on and off to gather the fruits. Both net and posts last for a number of years if properly kept for this purpose. The varieties of strawberries are manifold for main crops, but such standard sorts as Laxton's Leader, Reward, Royal Sovereign, Utility, Bedford Champion, The Duke and Givon's Late Prolific may be relied upon, having stood the test of time. A few rows of that good old strawberry, Vicomtesse Hericart de Thury, should be included for preserving purposes; it is very firm and sweet, consequently most of the fruits preserve whole, and for this reason it is esteemed by many. It is an abundant cropper.

Having dwelt at considerable length on the main crop—which is, of course, the most important, a few remarks on the late sorts, thereby extending the season's supply, may be opportune.

#### LATE VARIETIES.

As already mentioned, strawberries are always appreciated so long as they are obtainable in good condition.

By reserving a goodly portion of the north border, and planting late varieties, the season may be considerably prolonged.

The ground should be well manured and prepared, as previously advised for other beds.

It will be noted that many of these late varieties are not of such a vigorous habit of growth. Consequently, they may be planted in rows 2ft. apart, allowing 1ft. between the plants, for the first season, removing alternate plants afterwards, as already described, eventually leaving all at 2ft. The varieties for late fruiting may include Waterloo, Trafalgar (two excellent strawberries, dissimilar in colour and ripening at the same time—a valuable addition for dessert), Givon's Late Prolific (another fine strawberry), Laxton's Latest and the newer Laxton's Rearguard. From these late strawberries fruits may be gathered for several weeks after others are over.

Should the weather prove at all unfavourable, lights may be placed over the fruits on inverted pots, nets being used over the lights as for the early supply.

I have found strawberries grown on the north border to fruit well for three seasons, growth being less rampant in such varieties and position.

Having thus described the various ways of prolonging the strawberry season, I venture a few further remarks.

It is an open question whether strawberries are cultivated as well now as in former years.

Certainly, as regards quantities for market they have undoubtedly increased. But from a private point of view, I do not think they are so well grown. One of the great drawbacks to the successful



cultivation undoubtedly is the great difficulty in obtaining manure—good stable manure. Whereas in times past abundant supplies could be had from the stables, now very little, or none at all, can be had, as motors have taken the place of horses. Again, the high price, when the manure can be obtained, prohibits the liberal use of it, as gardeners would like to use it. Another cause is the shortage of labour in many gardens; the time cannot be spared

for everything as in years past. To grow strawberries well, they require plenty of manure, and will pay for it in the long run. I well remember growing that fine old strawberry, Laxton's Reward, plenty of fruits seven to eight to the pound, brilliant crimson in colour, and of fine flavour. It seems a pity some of these sorts go out of cultivation.

Strawberries, after being grown in the same garden for a number of years, deteriorate, much the same as do potatoes.

Hence the necessity of obtaining fresh stock occasionally. Most of our nurserymen raise plants for sale annually, notably Messrs. Laxton Brothers, strawberry specialists, who have raised most of our new varieties, as well as the old favourites.

The present is a most suitable time to secure plants, and no better time than the present to make plantations for next season's fruiting, either by purchased or home-raised plants. I. HAWKES.

## CORRESPONDENCE

### FORTUNE'S YELLOW ROSE.

SIR,—From the description of the climbing rose on the Italian lakes, and its fragrance, I am pretty sure that the rose "M. L." saw there last spring is Fortune's Yellow—"Jaune de Fortune" as they call it on the Riviera. It succeeds well in southern England, but it needs *moisture* and shelter; hence its vigour and beauty on Lake Como.—E. H. W.

### GLASSHOUSES.

SIR,—In the very interesting editorial leader of THE GARDEN of July 11th, every line contains matter for thought on the part of those who possess glasshouses. But I would like permission to refer to one only of the many points, namely, "the uses to which the glasshouse will be put during the coming season." One of my four glasshouses is unheated, and perhaps it may be helpful to others if I briefly state how I use it during the whole year. My year's treatment begins in November by planting stocks, Beauty of Nice and Empress Elizabeth respectively, in the side borders next to the walls, which are low. The remaining parts of the structure are filled with chrysanthemums in pots and lifted from the outside borders. In January the borders are sown with radishes, French breakfast varieties, and on both sides of the central path sweet peas are planted. Two crops of radishes are raised before their place is occupied by tomatoes, and in the meantime the stocks are yielding their fragrant flowers for cutting purposes. The sweet peas are cleared out at the end of June, also the stocks, and two rows of late tomatoes take the place of the stocks. In October the chrysanthemums are again brought in. At both ends of this span-roofed glasshouse roses are grown, being planted in the borders, pruned in late autumn, and yield pink, white and crimson blooms from early May to autumn—four lots altogether. This has been my plan with the unheated house during the past ten years. At a very small cost it has yielded a lot of valuable produce. Others may do similarly.—G. G.

### PRONUNCIATION OF BOTANICAL LATIN.

SIR,—The following remarks may assist your correspondent F. C. King and any others who may experience the same difficulty. Pronounce long Latin vowels thus: e as a in plate, and a, i, o and u as in father, machine, stoke and rule; y as ui in guid (Scots), æ as i in ride, and œ as oi in voice. Short Latin vowels are pronounced much in the same way as long ones, but less broadly. If this is too difficult an exercise in phonetics, pronounce them as in the English fan, desk, sing, hot and butcher. Latin consonants are as in English except j and v, which pronounce as y in you and w in win; c and ch are always as English k; g and s always as in get and send. The foregoing rules apply to pure Latin, but much of botanical Latin, so called, consists of modern surnames

and place names with -ia, -ense, etc., tacked on to the end. It really does not matter much how these names are pronounced; the construction of most of them is so hopelessly bad that no conceivable method of pronouncing them would be correct. They should never have been coined at all, and the best thing to do with them is to leave them alone as far as possible, use the equivalent English name whenever there is one, and invent one when there is not; but if they must be tackled, the most usual way of pronouncing all the important ones will be found in Webster's New International Dictionary, which can be consulted at some convenient free library. In specific names commencing with a capital letter and ending with two i's, the second i may be omitted in speaking, and for that matter in writing as well; it is redundant, and its presence is due chiefly to a red tape regulation made by some conference or other. In ordinary conversation, when referring to a generic name by itself, the usual rules of Latin are often not followed; thus of the two instances mentioned by your correspondent cyclamen would in such circumstances be pronounced siklamen. It is to be observed, too, that some botanical names are Greek, not Latin.

The foregoing comments do not touch on the accentuation of pure Latin, that is, which syllables ought to be stressed and whether the vowels are long or short; this cannot be dealt with briefly, but the information can be found in the case of any particular word on referring to an ordinary Latin dictionary, one or more of which will be available at the nearest town (public) library. More could be added, but I will not trespass further upon your space.—H. A. BAYNE.

### ROSE ARTHUR COOK.

SIR,—Can any of your readers who are experts on roses give me their opinion of the Rose Arthur Cook, and whether their experience is the same as mine?

I have four plants of this rose. On some the bloom comes perfectly true, a rich crimson, others on the same plant come with pink petals, and one almost a pink rose. In my rose house this difference did not appear, but I should be glad to know whether growers find that it has this habit. The blossom which came out pink was of a lumpy shape, and it had no characteristics of the rose as described.—LADY ARDILAUN, Dublin.

### FEIJOA SELLOWIANA.

SIR,—This flowering shrub has done extraordinarily well this year and is a mass of bloom; it seems quite hardy. When at Messrs. Veitch's gardens in Exeter last week, the foreman complained of their plant not flowering. On seeing it, I found it was between two glasshouses in the shade, and there is no doubt it requires to be in full sun. A few years ago it fruited with me.—H. G. HAWKER, Devon.

### OLEARIAS.

SIR,—I venture to add a word to Sir Herbert Maxwell's very interesting article on Olearias.

Yes, *O. semidentata* is certainly a very desirable shrub. I find that it stands a great deal of wind, as does *chathamica*; and its grey-green and silver leaves are of rare beauty, even if it were never hung, as it was recently, with its pale lilac, dark-centred daisy flowers. I put this very high among flowering shrubs for wild gardens.

There is a hybrid between *O. stellulata* and *O. lineata* which is a finer plant even than the type: the flowers are more striking and the plant is less liable to look ragged after flowering or after bad weather. It makes a larger bush than *stellulata*.

*O. lacunosa* is growing now in a few Cornish gardens. It appears to need shade. There is a delightful picture of a full grown bush of it in Dr. Cockayne's small book on the New Zealand flora.

*O. ramulosa* is a beautiful little creature, covered with small white stars; and *O. Solandri*, like *virgata*, is a good seaside plant.

Sir H. Maxwell has little use for *O. Traversii*, as its flowers are very uninteresting: but as a quick-growing shelter plant it has, I think, a very high value. It is a beautiful grey-green evergreen, always healthy-looking and trim, and flashes brilliantly white in the wind. It grows marvellously fast, making a tall hedge in three years from cuttings even in the poorest wind-swept spot. I have found very few plants so good for a windy exposure, especially if it is pruned down a bit till well established. I hear that they have an equally good opinion of it at Scarborough, where it is being planted extensively for shelter.

The one other olearia I want to refer to is *O. oleifolia*. The late Mr. T. Smith of Newry, that great expert, considered this, I believe, one of the best shrubs of recent introduction for windy seaside gardens; and its behaviour here seems fully to justify this. It makes a solid, well furnished evergreen, covered with white flowers in autumn, and thrives in the fiercest sea wind. I have planted it with *O. Traversii* and *O. albida* on a rocky bluff 600ft. over the Atlantic, with no shelter whatever, and it continues to thrive unscorched and undistorted.—W. ARNOLD-FORSTER, Cornwall.

### FAILURE OF GYPSOPHILA.

SIR,—Under the heading "Failure of Gypsophila" a contributor in your issue of August 1st suggests the use of superphosphate for correcting a deficiency of lime in the soil. But superphosphate cannot fail to reduce the quantity of available lime. I have used it successfully for that very purpose in converting a somewhat chalky soil into a lime-free medium for the culture of ericaceous plants. The excess of phosphoric acid implied in the prefix "super" is responsible for the lime-reducing effect.—MICHAEL CHAMPNEYS, Suffolk.



# SIMPLE GARDENING

## LAYERING BORDER CARNATIONS.

AS the weather was very hot and dry for some time just before Midsummer Day and again for a time soon after, the work of layering border carnations was delayed in many parts, the soil being too dry and the wood of the plants rather hard. Layers should be rooted as early as possible, so that the young rooted plants can be planted in their flowering quarters early in the autumn to ensure a safe passage through the winter. But to those who love these flowers I would like to say, make preparations now for the layering of as many plants as possible in a short time and give them careful attention afterwards. During very hot weather I like to use more, rather than less, of the heavier part—loam—of the compost in proportion; and later in the season, more sand and leaf-soil, so that the compost will not retain moisture too much if a spell of rainy weather comes. The compost should remain sweet if new roots are to enter it freely. Carefully examine the parent plants and remove all foreign matter found under them and all faded leaves. Having mixed the compost, as suggested, be liberal when packing it around the old plants, so that the layers will have plenty of body to root into. Each layer should be denuded of its basal leaves, and cut, slant-wise, from the underside upwards and half way through the stem with a sharp knife. Place a tiny stone in the cut stem, bury that portion of it in the new soil, peg down and water when necessary till roots are formed.

## HARDY BORDER FLOWERS.

The past summer weather has been very trying for all open border plants, except in soils low-lying and naturally moist. I know one garden where the tidal waters come near to it in open dykes and, about 3ft. below the surface one can always find water, however dry the season may be. The owner of this garden can always grow extra fine herbaceous plants in dry summers and has no difficulty in keeping the borders bright and in a neat condition. This is not the case where borders are high and naturally dry; such borders require much more attention throughout the season: it is necessary to clean the plants often and to remove the faded leaves and flowers; more water is needed and also good mulches to prevent undue evaporation from the soil. At the present time owners of such gardens should put them in good order. Do not remove any more green leaves and stems than absolutely necessary, because such action would weaken the plants. Some cultivators, in order that they may have very neat borders, cut down too much foliage. The stems, of course, die at the end of the season, but they should be allowed to fade as naturally as possible, then the roots and young crowns which are to bear next years' crops of flowers will be duly strengthened, not weakened, as is the case when the plants are slaughtered

at this time of the year. Make notes now about future alterations and renew defaced labels.

## "TAKING" CHRYSANTHEMUM BUDS.

There are still many lovers of the big blooms, those large, but refined and richly coloured. It is only by timely disbudding that one can secure the big blooms and by taking the right buds according to the varieties. Some, such as Mrs. Gilbert Drabble, William Rigby and Queen Mary, Majestic and Victory, must be disbudded during the latter part of July; the majority of the varieties grown should have their buds taken about August 10th to 20th, a few, such as Mrs. George Monro, Junr., bear the best blooms when their buds are taken late in August. I have seen fine blooms



resultant from buds taken late in September, but this is an exception and the happy medium is the best. Very early buds of naturally early sorts develop into coarse, badly-coloured blooms. Crown buds are dealt with first; they are the ones which are surrounded by young shoots as shown at *a* and *b* respectively. At *c*, lower down the stem, side shoots have been pinched out on earlier dates. If the crown bud *a* is removed and the side shoots grown on, we have terminal buds; *d* is the terminal to retain and side ones *e, e*, the ones to remove. Tiny grubs spoil many points of shoots and buds at this stage; examine curled-up leaves as the grub *f* will come out from *g*, quickly, and destroy it. The grub is shown at *h*, made clear, eating a young bud *i*. All eaten buds are useless. Plants free at night are infested the next morning.

## ROSES IN POTS AND UNDER GLASS.

Plants that were flowered under glass in pots should be snugly placed on a bed of ashes outside and the pots buried to their rims in ashes or well rotted leaf-soil. The treatment during the summer months is very simple and consists of attention to watering and the removal of any buds that form, also young sub-lateral shoots, but do not cut away any of the hard wood. From this date to the end of September re-potting or top-dressing work should be done. As a guide as to the exact treatment most suitable at this stage, I may say, turn out the old balls of soil from the pots; if roots are plentiful, in fact, almost forming a network round the old balls of soil, it is a sure indication that re-potting is necessary. If there are not many roots visible, then top-dressing only will be sufficient. When re-potting, shift the plants to pots just one size larger than the old ones; if top-dressing is done, remove the old soil from the surface low enough to expose a few of the top roots. For both re-potting and top-dressing use a compost of fibrous loam with a 6in. potful of bonemeal added to each bushel. Secure sound drainage and pot firmly. Water carefully and leave the pruning till the end of the year, keeping the plants outside till late autumn. Permanent plants under glass should be kept as cool as possible and free from aphides. Prune in December.

## POTATOES.

In some parts of the country potatoes will be quite satisfactory, in others they will be very unsatisfactory. I am referring now to crops generally—early, medium and late. Cultivators should not save seeds from their own gardens of any variety more than two years, after the second year the resultant crop, from home-saved tubers, often develops rust and the common diseases very badly and fail, too, to yield a full crop. A change of seed is beneficial and those obtaining it should always procure tubers from gardens and farms as far north as is possible of their own. But even seed from a neighbour's garden in the same village or district is better than one's own, after the second year. Now, just a few hints on saving one's own tubers for next year's planting. In each quarter and of each distinct variety, the best roots should be selected—those least ripened and possessing the most robust haulm. Lift these roots separately and retain seed tubers from them, not generally as the crop is lifted. Of course, a certain amount of exposure and greening is essential, but the tubers should never be allowed to get wet nor be unduly exposed to the sun. An ideal position for the tubers in shallow boxes is under tilted lights in a cold frame with mats on the glass for several weeks prior to placing them in the winter quarters. They should always be kept perfectly dry and in a cool even temperature so that they will remain dormant.

GEORGE GARNER.



## FAIR CROWNS. II—DELPHI AND APOLLO'S LAUREL

WE hear little of those apples mentioned by Solon as Pythian prizes, although they are represented on coins of Delphi, together with laurel wreaths. Probably they vanished all too quickly, and leaves would be a more permanent souvenir, and more akin to the Olympian prizes. The Pythian games, celebrated at Apollo's stronghold, Delphi, were only second to those of Olympia, and were a development of a small local festival devoted to Apollo and his lyre. These neighbourly competitions, chiefly musical, were reorganised as funeral games in honour of the victims who fought in the First Sacred War and in defence of Delphi. Such funeral games were common in old Greece, perhaps survivals of prehistoric sacrifices of prisoners or slaves at the graves of their masters, or of the sham battles which took their place; or perhaps it was thought that the souls of the dead would be pleased with the same sport as the living. In Homer's day, and later, they were merely contests of skill with weapons or muscles, between guests at the tombs of the great or in honour of them.

But, as in Olympia, people clung to the old picturesque legends explaining habits of which they knew not the origin. Delphians gloried in tales of Apollo and in his conquest over the huge serpent, or dragon, Pytho, the guardian of the oracle of Earth, an ancient shrine which preceded that of Apollo. Some said that the monster was ravaging the country when stopped by the arrows of the sun-god. As was customary after shedding blood, Apollo was ordered by

Zeus to purify himself, a rite usually managed by sprinkling pure water on the culprit either with a torch from the altar, or with a branch of laurel, or even of olive. Therefore the god betook himself to the laurel thickets of the Vale of Tempe, at the foot of Mount Olympus, and tore off branches for this purpose and to crown himself, and to carry in his hand. Having fulfilled his penance, he went back to Delphi, and took possession of the now unguarded shrine of Earth—a curious fissure in the ground whence fumes giving extraordinary powers of prophecy were supposed to issue, took it over and made it one of the most famous oracles of antiquity. But the laurel tree in the vale from which he tore the boughs of "lustration" was providentially noted, and an altar erected beneath it. Thence were taken those sprays of laurel that were woven into crowns of victory for the games which were called Pythian, either in memory of the slaughter of the dragon, Pytho, or because the town itself was occasionally called Pytho also.

Laurels grew around the shrine itself and about the temple, and were always used in rites of worship of this sun-god; and to explain their presence, the legendary tale of Daphne arose. That innocent damsel was trying to escape from the unwelcome caresses of Apollo, and called for help to her mother the Earth—the same goddess whose oracle had been stolen by the god. In answer, a chasm opened beneath her feet and into it she slipped as a refuge. A laurel tree marvellously sprang up in her

place, and when the pursuer arrived all he found was a handful of bays. The townsfolk probably believed that this happened at the oracular chasm, and that the very shrub imprisoning the nymph was still standing before the temple or in the Cave of Prophecies, casting its sombre shades over the Pythia, as the priestess of Apollo was called, when she was not referred to as a "bee." Here, having drunk of a sacred spring, fumigated herself with laurel leaves, and even chewed its sacred foliage, the priestess settled herself on a tripod over the marvellous earth-fissure, grasped the near-by laurel's trunk and invoked the sun-god. His presence was indicated by the shivering and rustling of his laurels, and thence he inspired the Pythia, who then uttered vague sentences, prophecies and commands, difficult to understand or to follow, but which were obeyed by all Greece as far as possible.

Now we understand why, since musical and dramatic competitions were important events at the Pythian games, centring about a Hymn to Apollo which related his exploits, the laurel crown became intimately associated with the arts, fostered by Apollo and his companions, the Muses. This artistic use of the laurel continued long after the last Pythian crown had crumbled into dust, just as laurel, in another aspect, as a symbol of victory, lingered long with the common people. Figuratively speaking, the custom of crowning a poet with "bays" has survived to this day, for England still appoints her "Poet Laureate." H. INGERSOLL.

## FLOWERS AT HAYWARD'S HEATH

THE thirty-fourth exhibition of the Hayward's Heath and Mid-Sussex Horticultural Society was held in Victoria Park on July 29th and July 30th. This horticultural society is one which possesses some excellent gardeners as its members, and the show promises to develop yearly. The Hayward's Heath district is particularly favourable to the horticulturist, both from the climatic and soil points of view. A show held in this neighbourhood is well worth a visit from nurseryman or amateur, and an exhibit from either would not be wasted effort on the part of the exhibitor.

Some splendid exhibits were staged by the trade and amateurs. In the private section competition was very keen. The quality of the fruit, nearly all of which came from local gardens, was excellent. Mr. W. J. Yapp (gardener, Mr. H. Manton) again won the Paxhill Park Challenge Trophy for an exhibit of twelve dishes of ripe fruit. The cherries, grapes and peaches were perfect. Mr. C. T. Allen (gardener, Mr. F. L. Telling) won prizes for grapes, melons, tomatoes and cucumbers. The fine size and condition of the specimens deserve praise. The peaches grown by Mr. A. E. Pattenden, the gardener of Mr. R. Carver, were remarkably good. The exhibits of the Right Hon. Lord Denman (gardener, Mr. W. Mackay) were well grown and well displayed, and many of them won first prizes. Mr. W. Manton, gardener to the Misses Helme, arranged a good collection of hardy fruit.

In the section for single-handed gardeners and amateurs the number of exhibits in each class were small. Prize tomatoes were shown in this division by Mrs. Ivatt (gardener, Mr. C. Holman) and cucumbers by Mr. L. H. Strouts (gardener, Mr. A. Laker). A most successful exhibitor of fruit and vegetables was Mr. G. Thomas. Gooseberries

and currants, particularly red currants, were of good quality. The specimens shown by Mr. G. Thomas were healthy, of even size and in perfect condition.

A collection of perennials shown by Mr. W. J. Yapp won the Society's "Coming-of-Age" Challenge Trophy. This same exhibitor was again this year awarded the Stewart Mackenzie of Seaforth Carnation Challenge Trophy for a display of perpetual carnations. The beautiful spikes of large-flowered gladioli and primulinus hybrids grown by Mr. W. D. Mackay were much admired. Carnations and star dahlias were well shown by Mrs. T. P. Warren (gardener, Mr. H. Nailor). When compared with the other floral exhibits, the sweet peas and roses were not outstanding, the stems were short and the flowers inferior in colour. The James Box Sweet Pea Cup went to Mrs. T. P. Warren. Phlox Elizabeth Campbell and Baron von Dedem were the two best varieties shown by Mr. W. S. Pool (gardener, Mr. J. G. Caswell). Good stocks were exhibited by Mr. Bridgden in the cottagers' section.

The collections of a number of distinct kinds of vegetables were admirably staged. Dr. G. T. Walters (gardener, Mr. C. Harris) was again successful in winning the Society's Coronation Challenge Bowl for a collection of vegetables. A very creditable group was staged by the Scaynes Hill Women's Institute. The peas and carrots exhibits were of good quality in nearly every case. Mrs. T. P. Warren and Mr. J. White showed prize potatoes. Well ripened onions were shown by Mr. W. D. Mackay. Peas and beans grown by Mr. W. Manton, won prizes, and Mr. P. W. Carver was successful in several classes. The *Mid-Sussex Times* Challenge Cup for vegetables was awarded to Mr. G. Keen.

A good group of gloxinias was staged by Mr. T. W. Thompson (gardener, Mr. R. T. Axbel) and a table of greenhouse plants by Mrs. Ivatt.

Mrs. T. Sydenham won the silver challenge cup for table decoration in the ladies' section. The baskets of flowers and foliage were very good, Mrs. A. M. Swann gaining the first prize. In the children's section interesting collections of well named wild flowers were exhibited.

Several excellent trade exhibits made striking patches of colour in the tent. Mr. Elisha Hicks was to be congratulated on his first prize stand of roses. The arrangement and condition of the blooms left nothing to be desired. Beautiful blooms of W. F. Dreer, Los Angeles, the sweetly scented Mrs. E. Powell, together with Betty Uprichard, one of the best of the newer roses, were artistically displayed. At one end of the tent a prominent ground exhibit of hardy flowers was staged by Mr. James Box of Hayward's Heath, and at the other end Messrs. Allwood Brothers made a fine display with their carnations. Mr. James Box had a small lily pool in the centre of his group, and surrounding it were water-loving plants. At the back of this hardy flowers of all kinds were set out in a semi-circular bed. Messrs. Allwood Brothers showed several of their 1925 novelties, such as Beauty of Durham and M. M. Stoop, together with perfect blooms of Coral Glow and Laddie.

A wonderful collection of beautiful orchids was shown by Messrs. Charlesworth. Many fine varieties and species were included, and all in excellent condition. The Chez Nous Nurseries had an interesting exhibit of miniature Japanese gardens and dwarf Japanese trees in bowls. Roses were shown by Mr. Frank Woollard and Messrs. J. Cheals had many fine perennials among their exhibit of hardy flowers. Herbaceous plants, shrubs, climbers, alpine and gooseberries were shown by Mr. H. Hemsley. The stock-flowered larkspurs shown by Messrs. Daniel Brothers were greatly admired.



## THE SPREAD OF GARDENING IN AMERICA

WHEN the Garden Club of America visited the old gardens of Virginia this spring as the guests of the James River Garden Club, they felt themselves at the source of fine gardening in their country. Those old gardens have in them still the very flavour of England, that quiet beauty which only age can bring. And from England it was, of course, that the dwellers in old Virginia brought their love of gardening, their idea of the garden. Other parts of America, however, had gardens, too, in our early time—Philadelphia. New York, with the gardens of the Dutch, and much later, Rochester, New York, where gardening has flourished exceedingly for many years.

There was a time, however—perhaps about the 'sixties and 'seventies—when the pursuit was limited generally to a small amount of bedding out. A few fine old gardens were dear to their owners in various States, but the rank and file cared nothing for them. Then appeared a few gardening books, and a good monthly periodical devoted to gardening alone. This brought fresh life to the various horticultural societies of the country, and so the first garden club was born—the Garden Club of Philadelphia. This event—it has become an event, though not then so considered by its founders—has proved to be the one which more than any other has brought gardening and the love of gardening to Americans. We are known as passionate organisers; and no doubt it has hurt some amateurs to see our organising carried into this personal field. But see what this has done for America. Not only did the Garden Club of America spring from this Garden Club of Philadelphia, but hundreds of other clubs are now in active, happy existence, which, but for such organising, would not have been formed.

The Garden Club of America, of which Mrs. Samuel Sloan is president, is an organisation or more than sixty member clubs, with committees on such subjects as colour charts for flowers, bill-boards and road sides, international relations (which means nothing less gentle than visits to gardens of other countries), visiting gardens in our own country, flower shows, the national capital conservation of wild flowers, historic gardens and so on. A remarkably fine bulletin for members appears six times a year. This organisation is a very powerful one. It has a membership of clubs, not of individuals. Its effect on gardening as an art, is already vital, and the many garden clubs now springing up all over the land are due in large measure to the example and stimulus of the Garden Club of America. Forty garden clubs in New York State alone have lately formed a group of their own. This federation, according to one of its members, hopes to encourage "the garden for the poor, the near poor and the well-to-do." Besides these groups many garden clubs are coming into existence from month to month in all the States. The movement is growing rapidly. The Garden Club of America

welcomes the formation of the Garden Club, Limited, in London, and has already pleasant intercourse with the new society.

Another group which encourages gardening, is the Woman's National Farm and Garden Association. This helps also to form garden clubs, though its main objects are more nearly related to those of the Women's Institutes of England, with which it has most friendly relations. The Society of Little Gardens of Philadelphia is doing a fine work; so is the City Gardens Club of New York. And in women's clubs throughout the country there are now many so-called garden departments which press the subject continually.

So far I have named only women's organisations. I remember Mr. E. A. Bowles' writing me once that he believed women were more interested in colour effects in gardening than in the individual plant; that men, he thought, preferred to deal with the latter. In view of this comment, it is really interesting to notice that men are foremost here in the special plant society. Men started the garden movement in America long ago, through the founding of the great horticultural societies of Philadelphia, Massachusetts and New York. In New York such men as the great botanist, Dr. N. L. Britton, Mr. Frederick Newbold, Mr. T. A. Havemeyer, in Boston the late Richard T. Saltonstall, Mr. A. C. Burrage, whose orchids have world-wide fame, are some of the leaders in these societies; while Professor Saunders in the Peony Society, Mr. John C. Wister in the Iris Society, and Mr. Horace McFarland in that of the rose, are certainly among the best of our amateurs and have made distinct contributions to American horticulture. To Mrs. Edward Harding, too, and to Mrs. Charles H. Stout, are due much of the present interest in the peony and the dahlia.

Of gardening periodicals for the amateurs, we have but two or three. We need a weekly like THE GARDEN. Flower shows are held now almost daily in all parts of the country, and at all seasons of the year. Here may I let the eagle flap his wings a little, and say that even in December and January in our wide land, shows of flowers grown in the open are held in Florida and California. They sometimes occur in unlooked-for buildings; banks welcome them to their foyers. In Michigan there is a growing tendency in its smaller cities, to have exhibitions of irises, peonies and gladioli, three flowers which men seem particularly to fancy. The great botanic gardens of the country are to-day immensely popular, the Arnold Arboretum (presided over by Professor Sargent, with Mr. E. H. Wilson as its explorer), the New York Botanic Garden, and that at St. Louis, Missouri. We look for a National Arboretum soon at Washington.

Our general type of garden, our best garden, is, I think, the modified English one. There are some great gardens Italianesque or English in manner; but it is the gardens of moderate or modest size

that are generally being made to-day. As our houses grow within and without quieter, more comfortable in architectural lines, so our gardens begin to seem like parts of our houses, our actual places for living. What we owe to the great William Robinson, to Miss Jekyll, cannot be put into words. We can only say warmly to you in Britain, "Come into our gardens and we will show you what we have inherited from, and tried to learn from you."

I have named some of the concrete agencies at work in America toward the spreading of the garden. But there is another all-powerful one, without which organisations, societies, arboreta, could do little. It is the impulse toward beauty, which brings everyone in time to see that in a garden lies a happiness that is in no other possession. FRANCIS KING.

### RANUNCULUS FICARIA (THE LESSER CELANDINE).

THIS little plant is not a true member of the Ranunculaceæ order, which has its sepals and petals in fives or multiples of fives. The lesser celandine has three deciduous instead of five persistent sepals and nine petals. Last spring I came across what is to me a new variety of this plant, one with double flowers. It was growing among masses of the ordinary single-flowered plants, and there were blossoms in every stage of doubling, from two whorls of petals to a densely petalled flower. The owner of the garden has left all these plants undisturbed and for many years the double-flowered variety has been gradually ousting its single-flowered relative. Clumps of the newer variety have made their appearance in quite another part of the garden. They appear to have a more compact growth than the single variety. This plant would be a pretty addition to the wild garden and a valuable one to the rock garden, as it blossoms so early in the year. I cannot share your poetical correspondent's aversion for the lesser celandine or see that it is a nuisance, as, so soon as it has blossomed, it modestly disappears. Old Gerard thus described it: "It cometh forth about the Calends of March, and floureth a little after; it beginneth to fade in Aprill; it is quite gone in May and afterwards it is hard to be found; yea scarcely the root of it."

Many plants appear to change their characteristics by their own accord. One example is the bee orchis, which was at one time entirely fertilised by insects, but has for many years been tending towards self-fertilisation.

Then there is the yellow musk, which in the last fifty years has almost entirely ceased to manufacture scent. (There are rare cases where scented musk can still be found, but these become scarcer every year. In 1914 I found a clump of sweet-smelling musk near Guildford. In 1918 it was scentless!)

The musk has, apparently, found out how to fertilise itself, and so no longer need waste its energy in manufacturing scent to attract insects.

The double *R. ficaria* has modified the stamens of the single flower into petals, and so ceased to make pollen. At first sight this certainly appears to be an attempt to kill out its species, but if we go more deeply into the matter we may discover that this is not the case. Another native plant, *Cardamine pratensis* (lady's smock), has in some districts produced a double-flowered variety which has very gradually killed out all the



single ones in its vicinity. *C. pratensis* evidently thought the matter well out, for, while nullifying its stamens, it evolved a scheme for continuing its race without them. Indeed, the double variety is much more prolific than the more frequent single-flowered lady's smock, or cuckoo flower, for each leaflet sends out roots and becomes a new plant so soon as it touches the ground. As they wither the flowers send up a flower bud from their centre which is *sometimes* single. May not the bee orchis, the musk and the lesser celandine have some such plan in their mystic minds? Such means of propagation is an evolution, since the manufacture of pollen and the formation of seeds—*i.e.*, sexual propagation—require a vast amount of energy from the plant and are done without by double-flowered plants. In the course of years the bee orchis and the musk, instead of fertilising themselves, may evolve a sexual reproduction.

There may be yet another reason for *R. ficaria* producing double blossoms. It flowers at a time of year when there is little sun and when very few insects are about to cross-fertilise its flowers. So perhaps it is to save itself from extinction that this particular colony of lesser celandines is turning its stamens into petals. VICTORIA SLADE.

### KILLING SLUGS—A SIMPLE AND SUCCESSFUL METHOD.

WHEN a small boy, I was much addicted to "chemical experiments." Once I tried the effect of putting a slug into ammonia. The slug "fizzed up," dissolved away, and formed a jelly. The original experiment can be easily repeated. Most people keep ammonia in the house, and most people have an ample supply of slugs in their gardens!

During the war it so happened that my house and garden stood for long empty and neglected. When I again took steps to rehabilitate the garden, the slug pest had assumed prodigious dimensions. Gathering slugs by hand is a weariness to the flesh, especially about the small of the back. I called to mind my youthful experiment, and applied the discovery. The result was altogether successful. The method may not be new, but I never heard of it before, I imagine there will be many others in like case.

Buy from a wholesale drysalter a bottle of the strongest liquid ammonia. This is sold in "Winchester quarts" (rather less than a gallon), and is not expensive.

This ammonia is called by the trade name of "eighty-eight" ammonia. It is very strong. It is not a poison in the ordinary sense, but it is corrosive. It will burn skin or clothes and must be handled with care. If any does get on to hand or garments, wet the place with vinegar. This will neutralise the ammonia.

Do all mixing outside, and keep on the side from which the wind is blowing. One good sniff of this strong ammonia will make you take jolly good care to avoid a second! Do not mix more at a time than you are going to use, because, unless kept in a sealed vessel, it will go stale.

To produce a good working strength for use in the garden, mix about two breakfast cupfuls of the "eighty-eight" ammonia with two gallons of water. Very accurate measure is not essential. The mixture should just have a pretty distinct smell of ammonia.

Use an ordinary watering can with a rose, and after dark, when the slugs will be abroad, water the rows of plants. Every slug that comes in contact with the solution will cease to be, while the plants will not be injured in any way. On the contrary, the ammonia is of some manurial value. W. J. G. F.

## BOOK REVIEWS

A MOST interesting and instructive French volume on ornamental trees and shrubs has come to our notice, "*Les Arbres et Arbustes d'Ornement*," by S. Mottet; published by J. B. Baillière et Fils, éditeurs, 19, rue Hautefeuille, Paris, price 50 francs.

After a few preliminary remarks on the constitution of trees and shrubs, their value in the garden from an ornamental point of view and the various uses to which they can be put either as isolated plants or in clumps, the author devotes the greater part of the work to an enumeration and description of woody, climbing and shrubby genera and species and their principal varieties which adorn our gardens at the present day. In addition quite a number of the most interesting new species which have been introduced from China during the last thirty years are figured and described. This section, which covers some 470 pages, is brought to a close by a descriptive table of 2,500 species, including many of minor interest.

Following this are a few chapters devoted to propagation, planting and other cultural details, such as pruning, much the same rules being laid down as those met with in English manuals on the same subject. Finally, a useful list of choice trees and shrubs selected for various purposes with regard to soil, climatic and general topographical conditions is given. This list will provide a valuable mnemonic to all professional growers and a serviceable guide to all amateurs who are faced with difficulties when planting for effect. The genera and species have been treated under their family groups, in each family the genera following alphabetically. Latin nomenclature is adhered to, while in the majority of cases the common name is supplied, which will greatly facilitate the work of reference.

The volume is dedicated to the memory of the late M. Maurice L. de Vilmorin, one of the pioneers of French horticulture, with whom the author was closely associated for a long period, being in charge of all the experimental work at the establishment of Messrs. Vilmorin's at Verrières-le-Buisson.

The book will be found of great service to all nurserymen and to amateurs who have already gained a little knowledge of trees and shrubs. To students of horticulture and forestry it is recommended as a work which gives a concise and clear exposition of the treatment of trees and shrubs, with the proviso, however, that the reader must have a knowledge of French.

THE title of this book, namely, "*A Garden Timepiece*," by M. G. Kennedy-Bell (Hutchinson and Co., Paternoster Row, E.C.4, price 7s. 6d. net), fascinates me. One is led to expect that indefinable something which is genuinely wanting in gardening books, and one's expectations are fully realised on turning over its pages. It is a well balanced book on gardening, in which the æsthetic and artistic sides of the subject are cleverly woven into an interesting story along with more practical and everyday details and problems with which the average gardener has to contend. The year's work is dealt with in a thoroughly business-like manner, indicating that the author is well acquainted with her subject, and the book serves as an excellent all-round guide to all gardening enthusiasts. It is charmingly written, yet without it does not lose that vital force which is so necessary to a practical manual. The illustrations are of the very best, being the work of the late Mr. R. A. Malby, and these greatly enhance the value of the volume, which one can thoroughly recommend to all garden lovers. G. C. T.

THIS volume, "*Systematic Pomology*," by U. P. Hendrick (Rural Text Book Series, published by the Macmillan Company, New York, price 17s.), contains a systematic account of the commonest fruits represented by the best commercial and more widely known varieties in cultivation in America. As such it will prove useful to the practical as well as to the theoretical man in the identification of fruits. The book certainly marks a great advance in pomological study, and we on this side will find it instructive on that account. The first few chapters are devoted to general botany, which is a useful feature in a manual of this description. A chapter is given to each of the commoner fruits, such as the apple, pear, cherry, etc., wherein are discussed their characteristics and general cultivation. In looking through a systematic volume such as this is, we cannot but put forward a plea for the establishment of some international system of nomenclature which would at least tend to lessen the duplication and confusion which exists in some of these newer branches of botanical study.

### PUBLICATIONS RECEIVED.

"*A Class Book of Botany*," by Ernest Stenhouse. (Macmillan and Co., Limited, St. Martin's Street, price 7s. 6d.)

"*Plants and Man*," by Professor F. O. Bower. (Macmillan and Co., price 14s.)

"*The Journal of Pomology and Horticultural Science*, Vol. IV, Nos. 3 and 4. (Headley Brothers, Bishopsgate, price 5s.)

### CATALOGUES RECEIVED.

Messrs. Hazlewood Bros., Epping, New South Wales, Australia.—A useful list of roses, ornamental trees and choice flowering shrubs, giving brief notes on rose culture, with special reference to disease and also to the climatic conditions met with in Australia. One or two excellent half-tone illustrations enhance the value of this catalogue which we recommend to any of our readers interested.

Charles Turner, The Royal Nurseries, Slough.—List of Dahlias for 1925 including many fine new varieties.

One of the earliest bulb catalogues to appear this year is that of Messrs. Carters of Raynes Park. Besides consisting of lists of everything that a garden requires in the way of bulbs, this catalogue is noticeable for the excellence of its production. In the past, prospective buyers of seeds or plants have had to rely a great deal on their imagination owing to the lack of illustrations and inadequate descriptions, but since the war seedsmen and nurserymen have begun to improve their catalogue productions. For the number and quality of the illustrations this catalogue of Messrs. Carters is one of the finest that we have ever seen. The coloured cover is a reproduction of their admirable stand at this year's Ideal Home Exhibition, while the half-tone illustrations could hardly be bettered.

Messrs. Laxton Brothers, Bedford.—Strawberries and Small Fruits.

#### FOREIGN.

Messrs. J. B. Vanderschoot, Hillegom, Holland.—A well illustrated catalogue containing useful lists of all bulbous plants.

Messrs. W. C. Roozen and Co., Limited, Overveen, Haarlem, Holland.—A well illustrated List of Dutch Bulbs and Other Plants for 1925-26.

**Windsor Rose Show.**—An error occurred in our report of this show in the issue of July 25th. The report should have read "Messrs. D. Prior and Sons have won the King's Cup three times, while Messrs. Frank Cant and Co. have won it now two years in succession, including this year."















